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ARACHNIDA

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12. ARACHNIDA

to which are added

MEROSTOMATA, PANTOPODA, PENTASTOMIDA, TARDIGRADA,

MYRIAPODA and ONYCHOPHORA

compiled by

ERNEST BROWNING

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I.—TITLES

The year of publication is omitted where it is the same as the volume year of the 'Record', namely (1957).

Direction 60. Designation under the Plenary Powers of a type species for the genus *Scorpio* Linnaeus, 1758 (Class Arachnida) in harmony with accustomed usage and suppression under the same Powers of the specific name *europaeus* Linnaeus, 1758, as published in the combination *Scorpio europaeus* (amendment of a Ruling given in Opinion 104). Opin. int. Comm. zool. Nom. **1E** : 1-12.

Direction 66. Completion and in certain cases correction of entries relating to the names of genera belonging to the Phylum Arthropoda, the names of which were placed on the *Official List of Generic Names in Zoology* in the period up to the end of 1936, other than entries relating to the names of genera belonging to the Class Insecta and to the Order Decapoda of the Class Crustacea. Opin. int. Comm. zool. Nom. **1E** (6) : 85-110.

Direction 67. Addition to the *Official List of Specific Names in Zoology* (a) of the specific names of twenty species belonging to the Classes Trilobita, Crustacea (other than species of the Order Decapoda), Diplopoda and Arachnida, each of which is the type species of a genus, the name of which was placed on the *Official List of Generic Names in Zoology* up to the end of 1936, and (b) of the specific name of one species belonging to the Class Arachnida which is currently treated as a senior synonym of the name of such a species. Opin. int. Comm. zool. Nom. **1E** (7) : 111-128.

Opinion 454. Designation under the Plenary Powers of a type species in harmony with accustomed usage for *Scolopendra* Linnaeus, 1758 (Class Chilopoda). Opin. int. Comm. zool. Nom. **15** : 357-378.

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Abusalimov, N. S. see Pospelova-Shtrom, M. V.

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Chromosome problems.—*Pandinus imperator*, Guénin; Meiosis in *Rhopalurus rochai*, Piza; *Leucage decorata*, Sharma & Tandon (4); *Pardosa lahorensis*, *Hippasa aglenoides* and *Selenops radialis*, Sharma & Singh (3); *Oxyopes* spp., Sharma & Tandon (5); *Plexippus* spp., Sharma & Sharma (2); *Ornithodoros moubata*, Geigy & Wagner; Meiosis, *Ornithodoros papillipes*, Sokolov (1); Hydrach., Keyl.

ECOLOGY & HABITS

Biology: Acarina (excl. Ixod.).—*Aceria sheldoni*, Hely; *Acarus siro*, Boczek; *Brevipalpus inornatus*, Dosse (4); *Brevipalpus lewisi*, Elmer & Jeppson; *Bryobia praetiosa*, English & Snetsinger; *Chorioptes bovis*, Sweatman (1); *Czenzspinska lordi*, Dosse & Schneider (8); *Eriophyes pyri*, Minder; *Halotydeus destructor* and *Penthaleus major*, Wright; *Otodectes cynotis*, Woodroffe; *Paratetranychus pratensis*, Malcolm; *Phyllocoptes gracilis*, Breakley & Batchelor; *Tetranychus viennensis*, Müller, G. F. W.; *Vatacarus ipoides*, Southcott (5); Itch mites of sheep, Galuzo (2).

Biology: Ixodoidea.—*Argas brumpti*, Davis & Mavros; *Argas brumpti* and *Ornithodoros foleyi*, Hoogstraal & Kaiser (2); *Ixodes persulcatus*, Mishin; *Ornithodoros foleyi*, Davis & Mavros (1); *Ornithodoros moubata*, Walton.

Ecology.—Pseudoscorp., Acar., Tardig. in moss & lichen, Pschorn-Walcher & Gunhold; *Trochosa ruricola*, Hackman (1); *Acarus siro*, Boczek; *Aceria tulipae*, Gibson; *Metatetranychus ulmi*, Berker; Oribatids of Finland, Karppinen; Bionomics and ecology of Oribatei, Winkler (2); *Paratetranychus ununguis*, Brammans (1); *Tetranychus urticae*, Mühlmann; *Boophilus microplus*, Snowball (1); *Dermacentor daghestanicus*, Afanas'eva (2); *Hyalomma asiaticum*, Afanas'eva (1).

Bionomics. — *Dermacentor pictus*, Lebedev; *Trombicula akamushi* and *T. scutellaris*, Sasa et al. (6).

Soil ecology.—Acarine of arable land, Baring; Acarina in the soil, Knülle; Nosek & (1); Sheals (1).

Ecological association.—Pseudoscorp., Aran., Acar. associated with carrion, Bornemissza; Aran. from apple trees, Dondale; Aganippini spiders, Main & (1).

Ecological associations: cavernicolous. *Eukoeneia spelaea*, Condé; Aran., Barajon.

Migration. — *Tetranychus telarius*, Boyle.

Distribution. — Geographical distribution in Western Australia of Aganippini spiders, Main; Vertical distribution of Oribatei, Knülle (2); Hydrach. of Pyrenees, Angelier; Vertical distribution of Hydrach., Láska; Trombiculids

in Central Asia and Kazakhstan, Bibikova et al. (1); Ixod. of U.S.S.R., Anastos; *Haemaphysalis flava*, Asanuma et al. (6); *Dermacentor variabilis* in New Hampshire, Blickle & Conklin; *Ornithodoros* in Transcaucasus, Shustrov; *Rhipicephalus humeralis*, Walker.

Dispersal. — *Tetranychus telarius*, Boyle; *Aceria tulipae*, Gibson & Painter (1).

Introduced Arach.—Aran. from Belgian Congo into Germany, Schmidt (3).

General habits.—Males and females of spiders, Denis, (1); *Dictyna civica*, Billaudelle; Lycosid spiders carrying snail shells, Locket & Marsh; *Histiostoma polypori* relationship with earwig, *Forficula auricularia*, Behura; *Laelaps echidninus*, Thomas, H. A.; *Steneotarsonemus pallidus*, Boyle & Haramoto (1).

Feeding habits.—*Isometroides vescus* feeding on *Conothele malayana*, Main (2); Aganippini spiders, Main; *Dictyna civica*, Billaudelle; Prey of *Dolomedes fimbriatus*, Schmidt (2); *Phoneutria fera*, Tretzel; Capture of prey by *Uroctea durandi*, Crome (3); *Chaetodactylus* spp., Lith; *Czenzspinska lordi*, Dosse & Schneider (8); *Echinolaelaps echidninus*, *Haemolaelaps glasgowi* and *Laelaps nuttalli*, Wharton & Cross; *Haemogamasus ambulans*, Furman (1); *Macrocheles glaber* preys on *Musca domestica*, Filipponi & Cervone; *Micromegistus bakeri*, Johnston et al.; *Ophionyssus natricis*, Camin & Ehrlich; *Ornithodoros moubata*, Walton; Oribatid, Murphy; Feeding times of trombiculid larvae, Harrison; Feeding and relationship of fertilization in Ixod., Balashov (1).

Courtship.—*Opisthophthalmus latimanus*, Alexander (1); Comparative survey of the Arach., Alexander & Ewer (2); *Euscorpis italicus*, Angermann; *Heterometrus scaber*, Mathew; *Tityus bahiensis* & *T. trivittatus*, Bücherl (3); *Dictyna civica*, Billaudelle; *Dolomedes fimbriatus*, Schmidt, (2); *Pardosa amentata*, Schmidt (1); *Phoneutria fera*, Tretzel; Pionid water mites, Mitchell (1).

Sex relations.—*Dolomedes fimbriatus*, Schmidt, G.

Oviposition.—*Dictyna civica*, Billaudelle; Function of cocoon of *Latrodectus geometricus*, Bouillon (1); *Dermacentor parumapertus*, Jorgensen.

Population studies.—*Trochosa rucicola*, Hackman (1); *Eotetranychus sexmaculatus* and *Metatetranychus citri*, Pratt; *Metatetranychus citri*, Jeppson et al.; *Tetranychus* and *Metatetranychus*, Hamstead & Gould; *Typhlodromus* spp., Dosse; Acarina in nests of wood rat, *Neotoma lepida lepida*, Howell et al.; Acarina from nests of *Peromyscus leucopus*, Drummond; Hydrach., Láska.

Seasonal abundance.—*Dermacentor parumapertus*, Rosasco.

Seasonal occurrence.—Trombiculids: Sasa et al (7).

Enemies.—Of scorpions, Vachon (5); Predators and parasites of Aganippini spiders, Main; *Conothele malayana* preyed on by *Isometroides vesus*, Main (2); *Dolomedes fimbriatus*, Schmidt (2); Acrocerid (*Oncodes fumatus*) parasitic on *Misumena vatia*, Crome; Ichneumonid parasites and Eulopid hyperparasite of egg-sacs of *Tetragnatha extensa*, Smith, K. G. V.; Spiders preyed upon by *Dipogon sayi* (Pompilidae), Medler & Koerber; *Baeus semilunum* (Hym.) parasite of eggs of spiders, Vachon (1); *Malacocoris chlorizans smaragdina* preying on eggs of *Metatetranychus ulmi*, Foschi & Carlotti (1); Predators of *Oligonychus pratensis*, Dean; Predators of Tetranychoids in Russia, Beglarov; Typhlodromids feeding on *Czenispinskia lordi*, Dosse & Schneider (8); *Ixodes ricinus* infected with *Beauveria globulifera* (fungi), Samšīņākovā.

Web construction.—Cribellate and ecribellate Aran., Lehmensick & Kullmann; *Dictyna civica*, Billaudelle.

Parasitism: Host lists.—Egyptian Ixod., Hoogstraal & Kaiser (3); Ixod. of U.S.S.R., Anastos; *Rhipicephalus humeralis*, Walker.

Parasitism: Mammalian hosts: General.—Acar. of *Eliomys quercinus* and *Glis glis*, Jurik; Acar. of small mammals in Poland, Zapletal; Acar. of rodents and nests in U.S.S.R., Visoshkaya & Bregetova; Acar. of rats in Japan, Asanuma; Acar. from rodents in Haifa, Gratz; Acar. in nests of *Neotoma l. lepida* in U.S.A., Allred & Roscoe (6); Laelaptid and trombiculid of small forest mammals in California, Jameson & Brennan; Egyptian ticks, Hoogstraal et al. (4); Ticks and mites of Indiana mammals, Wilson; Acar. of

small mammals of Maryland, Drummond (1); Haemogamasidae off mice in Utah, Allred, D. M. (2).

Parasitism: Mammalian hosts: Mesostigmata.—*Bdellonyssus bacoti* attacking man, Skierska; *Dermanyssus gallinae* attacking man, Duncan; *Dermanyssus becki* and *Hirstionyssus femoralis* off *Peromyscus* spp., Allred; *Haemolaelaps dogieli* off *Sicista betulina* (forest mouse) Schulman; *Hirstionyssus gudauricus* off *Microtus gud.*, Razumova; *Hirstionyssus elongatus* off *Atherurus armatus* and *H. heliosciurus* off *Heliosciurus rufobrachium*, Taufflieb & Mouchet (1); *Hirstionyssus minor* and *H. myospalacis* off *Myospalax myospalax*, Zemskaya & Piontkovskaya; *Zygo-laelaps madagascariensis* off *Nesogale dobsoni* (Mamm.), Tipton; *Periglischrus strandtmanni* off bat (*Mormoops megalophylla senicula*), Tibbetts; *Pneumonyssus pangorillae* off chimpanzee, Pan paniscus and off Gorilla g. rex-pygmaeorum; *Pneumonyssus longus* off *Cercopithecus a. ascanius*, Fain (6); *Raillietia auris* off cattle, Menzies.

Parasitism: Mammalian hosts: Trombiculidae.—*Acomatacarus cooki* in ear of domestic cat, Southcott (3); *Acomatacarus dendrohyracis* off *Dendrohyracis* sp., *Acomatacarus lemniscomyia* off *Lemniscomys striatus*, Vercammen-Grandjean (3); *Acomatacarus (A.) mutabilis*, Schöngastia hyracis, *Trombicula mini*, *Trombicula rossi*, off Hyrax sp.; *Trombicula ugandae* off *Canis familiaris*; *Trombigastia cadei* off *Miniopterus* sp.; *Whartonia oweni* off *Rhinolophus eloquens* and off *Rousettus* sp., Vercammen-Grandjean & Brennan (5); *Acomatacarus romeri* and *Helenicula hongkongensis* of *Rattus rattus*, Womersley (2); *Ascoschongastia sellnicki* off *Rattus bowersi*; *Neotrombicula anax* off rat; *Pseudoschongastia novita* off *Rattus rajah*, off *Tupaia glis*; *Trombicula langati* off *Rattus edwardsi*, off *Rattus mulleri*, off *Callosciurus tenuis*, Audy & Womersley (6); *Crotiscus aetherios* off *Chinchillula sahamae* and off *Neotomys ebriosus*; *Crotiscus dispar* off *Punomys lemninus*; *Crotiscus frigipes* off *Neotomys ebriosus*, off *Chinchillula sahamae*, off *Phyllotis pictus*; *Crotiscus hayesi* off *Lagidium peruanum*, Brennan; *Elianella anomaluri* and *Euschöngastia mailloiti* off rat, *Cricetomys gambianus*, Taufflieb & Abonnenc; *Euschöngastia*

ulcerofaciens off *Microtus arvalis*, **Daniel**; *Euschöngastia pannonica* off *Citellus citellus* and off *Microtus arvalis*: *Trombicula* (*N.*) *parndorferensis* off *Talpa europea*, off *Citellus citellus*, off *Apodemus sylvaticus*, off *Clethrionomys glareolus*, **Kepka**; *Euschöngastia spalaxia* off *Spalax kirgisorum ehrenbergi* (rodent): *Trombicula acomys* and *T. palestinensis* off *Acomys cahirinus*, **Radford**; *Globularoschöngastia rattihai-konga* off rat, **Hsu & Chen**; *Gahrlepiea* (*W.*) *chinensis*, *G.* (*W.*) *pacifica*, *Acomatacarus majesticus*, all off *Rattus norvegicus*, **Chen & Hsu**; *Gahrlepiea* (*W.*) *koi* off *Rattus flavipectus*: *G.* (*G.*) *yangchenensis* off *Suncus murinus*, off *Rattus flavipectus* & *R. norvegicus*, **Chen & Hsu** (1); *Gahrlepiea neosinensis* off *Rattus* sp., **Hsu & Wen** (1); *Gahrlepiea alpestris* off *Rattus bowersi*: *G. cupa* off *Rattus raja* surifer: *G. cuspidata* off *Rattus sabanus*: *G. erana* off *Tupaia belangeri* versurae, off *Rattus f. fulvescens*, off *Rattus flavipectus yunnanensis*, off *Rattus r. sladeni*, off *Anourosorex squamipes assamensis*: *G. kritochaeta* off *Rattus r. thai*: *G. micropelta* off *Mus* sp.: *G. mima* off *Dremomys everetti*, off *Rattus w. whiteheadi*, off *Tupaia montana baluensis*, off *Nannosciurus whiteheadi*: *G. morrowae* off *Rattus sabanus*, off *Rattus alticola*: *G. nani-parma* off *Rattus w. whiteheadi*: *G. rectifunda* off *Rattus w. whiteheadi*: *G. simulata* off *Rattus edwardsi ciliatus*, off *Rattus alticola*, off *Rattus rattus*, off *Rattus soricicola*: *G. soricicola* off *Crociodura* sp., off *Rattus flavipectus yunnanensis*, off *Anourosorex squamipes*: *G. ewingi lupella* off *Bandicota* sp., **Traub & Evans**; *Gahrlepiea barbigera* off shrew: *G. fenestrulata* off rat: *G. marshi* off wild pig: *G. ordinata* off *Rattus a. alticola*: *G. argalea* off *Rattus sabanus* and tree shrew, *Tupaia glis*: *G. cucurbitula* off *Rattus* spp., **Traub & Morrow** (1); *Gahrlepiea* (*F.*) *felis* in nasal cavities of *Felis lybica ugandae* and *Gahrlepiea* (*F.*) *manis* in nasal cavities of *Manis* (*P.*) *tricusps*, **Vercammen-Grandjean & Fain** (6); *Healslipia weberi angolensis* off *Lemniscomys striatus*, **Vercammen-Grandjean & Audy** (4); *Traubacarus alticola*, *T. brachypus*, *T. browningi*, *T. domrowi*, *T. harrisoni*, *T. intermedia*, *T. jadini*, *T. manipurensis*, *T. ovenevansi*, *T. varmai*, *T. vercammeni* all off *Rattus* spp., **Audy**

& **Nadchatram** (5); *Trombicula* spp. off rodents in Czechoslovakia, **Daniel** (3); *Trombicula aguti* off *Dasyprocta aguti* and *T. pacae* off *Cuniculus paca* and off *Dasyprocta aguti*, **Floch & Fauran**; *Trombicula bandupi* and *Whartonia indica* off *Rhinolophus rouxi*, **Hire-gaudar & Bal** (3); *Trombicula* (*L.*) *fukuoka* off *Apodemus speciosus*, **Kamo**; *Trombicula raropinnis* off *Crociodura* sp. and off *Aticola* sp.: *Trombicula reptilis* off *Alsophylax pipiens*: *Trombicula tarda* off *Microtus nivalis*, off *Cricetulus migratorius*, off *Apodemus sylvaticus* and off *Prometheomys schaposchnikovi*, **Schluger**; *Trombicula densipiliata dumbletoni* off rat, **Womersley & Audy** (5); *Trombiculids* from rats in China, **Tung**; *Whartonia penthetor* off bat, *Cynopteris* (*P.*) *lucasi*, **Womersley** (1).

Parasitism: Mammalian hosts: Meta-stigmata.—*Amblyomma barbaricum* off buffalo, *Syncerus caffer pungwensis*: *Rhipicephalus confusus* off buffalo, *Syncerus caffer pungwensis*, off *Phacochoerus aethiopicus sundevalli*, off *Taurotragus oryx livingstoni*, off *Potamochoerus porcus koiroptamus*, off *Sylvicapra grimmia altifrons*, off *Ozanna g. grandicornis*, off *Kobus e. ellipsiprymnus*, **Dias**; *Aponomma capponi* off *Manis javanica*, **Toumanoff & Mailard**; *Dermacentor parumapertus* off *Lepus californicus deserticola*, **Rosasco**; *Haemaphysalis flava* off wild hares, **Asanuma et al.** (6); *Haemaphysalis nishiyamai* off *Sus taivanus*, off *Canis familiaris*, off *Homo sapiens*, **Sugimoto**; *Ixodes downsi* off bat, **Anoura g. geoffroyi**, **Kohls** (1); *Ixodes lemurus* off *Lemur rufifrons*: *Ixodes rageaui* off *Lasiopyga cephus* (*Mamm.*), **Arthur** (6); *Ixodes kaiseri* off *Vulpes vulpes aegyptiaca*, **Arthur** (2); *Ixodes colasbelcouri* off *Rattus r. alexandrinus*, **Arthur** (1); *Ixodes moreli* off *Cephalophus niver* (*Antelope*), **Arthur**; *Ixodes muniensis* off *Cephalophus* sp.; *I. procaviae* off *Dendrohyrax adolfriederici*; *I. pseudorasus* off leopard; *I. thomaeae* off *Arvicanthus abyssinicus nubilans* and off *Otomys tropicalis elgonis*, **Arthur & Burrow** (7); *Ixodes (Ixodopsis) stromi* off *Alticola argentatus*, off *Clethrionomys frater*, off *Stenocranius gregalis*, off *Apodemus sylvaticus*, **Filip-pova** (1); *Ixodes banksi* off beaver, *Castor canadensis*, **Hays & Lawrence**;

Ornithodoros lahorensis off sheep, **Gavrichenkov**; *Rhipicephalus boueti* off *Procavia ruficeps*, **Morel**; Off monkeys in Kenya, **Garnham**.

Parasitism: Mammalian hosts: Other Acarina.—*Acarus siro* in intestine of dog, **Vilorja**; *Archemyobia trinidadensis* off woolly opossum, **Tibbetts** (1); *Cheyletiella parasitivorax* causing dermatitis in man, **Pirilä & Muroma**; *Chorioptes bovis* off cow, horse, goat and sheep, **Sweatman**; *Demodex bovis* off cattle, **Koutz** (2); *Demodex canis* off pigs, **Bacigalupo & Roveda**; *Demodex* off dogs, **Koutz**; *Makialges lepilemuri* off *Lepilemur* sp.: *M. propithecii* off *Propithecus verreauxi*; *Psoroptoides gorillae* off Gorilla gorilla, **Gaud & Till** (4); *Myocoptes glareoli* off *Clethrionomys glareolus*, **Samšičak** (7); *Neomyobia luzonensis* off bat; *Notolaelaps nova guinea* off bat, *Syconycteris crassa papuana*; *Plesiolaclaps miniopterus* off bat, *Miniopterus schreibersi*, **Womersley** (3); *Psorergates hystrici* and *Rhinophaga hystrici* off *Hystrix africaeaustralis*, **Till** (2); *Rhinophaga atheruri* and *R. leopoldi* in frontal sinus of porcupine, *Atherurus africanus centralis*, **Fain** (3).

Parasitism: Avian hosts: Mesostigmata.—*Ptilonyssus cerchneis* off *Cerchneis tinnunculus rufescens*, *P. indicator* of *Indicator indicator*, *Sternostoma laniorum* var. *batis* off *Batis molitor puella*, **Fain** (8); *Ruandanyssus terpsiphonae* in nasal cavities of *Terpsiphon viridis kivuensis* and *R. apus* in nasal cavities of *Apus caffer streubeli*, **Fain**; *Sternostoma cisticolae* off *Cisticola chiniana*, **Fain** (2); *Sternostoma hutsoni*, *S. spatulatum* in nasal cavity of *Hylocichla u. ustulata* (russet-backed thrush) and *S. strandmanni* in nasal cavity of *Agelaius tricolor*, **Furman**.

Parasitism: Avian hosts: Prostigmata.—*Blankaartia lanarius* off *Laniarius erythrogaster*, **Radford**; *Euschöngastia* (*Helenicula*) *vercammengrandjeani* off Guinea-fowl (*Numida meleagris*), **Abonnenc & Taufflieb**; *Euschöngastia pilosa* off *Numida meleagris* (guinea-fowl), **Abonnenc & Taufflieb** (1); *Heaslipia weberi weberi* off *Capella media* (*Charadriiformes*), **Vercammen-Grandjean & Audy** (4); *Multigniella cosmetornis* off *Cosmetornis vexillarius*, **Vercammen-Grandjean & Fain** (7); *Syringophilus*

bipectinatus on domestic fowl, **Ram-mohan Rao & Hiregauder** (1); *Trombiculids* off birds, **Jeu & Wen** (2).

Parasitism: Avian hosts: Cryptostigmata.—*Anisodiscus eupariphus* off *Camaroptera brevicaudata tincta* and off *Herpysteira bairdi*: *A. megadiscus* off *Anthreptes frazeri camerounensis*; *Thyzanocercus callithyrus* off *Micropus affinis*; *Alloptes ferrandi* off *Phalacrocorax africanus*; *Alloptes orthogramme* off *Actitis hypoleucos*; *Alloptes stenurus* off *Hagedashia hagedash*; *Monojoubertia grandiloba* off *Anthreptes frazeri camerounensis*, off *Cyanomitra verticalis*, off *Cinnyris chloropygius*; *Protophyllodes acanthicaulus* off *Muscicapa striata*; *P. anisogamus* off *Picathartes oreas*; *P. aphyllus* off *Dicrurus atripennis*; *P. mecistocaulus* and *P. pachycaulus* off *Pyrrhus simplex*; *P. pachynotus* off *Pedilorrhynchus comitatus camerounensis*; *P. rhynchocaulus* off *Platysteira cyanea*; *P. stenophyllus* off *Pycnonotus barbatus gabonensis*, and off *Thescelocichla leucopleura*; *Brephosceles dolichocaulus* off *Actitis hypoleucos*; *B. histionotus* off *Charadrius forbesi*; *B. orthothrix* off *Galachrysia nuchalis*; *Pterodectes acotylurus* off *Vidua macroura*; *P. agriocercus* off *Pyrrhus simplex* and off *Baepogon indicator*; *P. allocaulus* off *Platysteira cyanea*; *P. amblycercus* off *Chloropeta natalensis batesi*; *P. brachycaulus* off *Malimbus coronatus*; *P. centropus* off *Trachylaemus purpuratus*; *P. dicruri*, off *Dicrurus atripennis* and off *D. adsimilis*; *P. diplocercus* off *Stizorhina frazeri*; *P. diplotrema* off *Poeyoptera lugubris*; *P. gigas* off *Amblyospiza albifrons saturata*; *P. glyphonotus* off *Alseonax cassini* and *Pedilorrhynchus comitatus*; *P. heterocaulus* off *Nigrita canicapilla*; *P. holostictus* off *Pycnonotus barbatus gabonensis*, off *Bleda eximia*, off *Calyptocichla serina*; *P. leioplax* off *Cossypha cyanocampter*, off *Chlorocichla simplex* and off *Atimastillas flavicollis soror*; *P. listroproctus* off *Picathartes oreas*; *P. mesocaulus* off *Anthreptes frazeri camerounensis*; *P. oligostictus* off *Lagonostica rubricata*, off *Clytospiza montei*, off *Estrilda nonnulla*; *P. pardalis* off *Malimbus coronatus*; *P. platynocercus* off *Eranornis longicauda*; *P. synosternus* off *Spermophaga haematina*; *Allanalgae eurysona* off *Gymobucco bonapartei*; *A. leiophyllus* off *Turdoides plebeja*; *A. octophyllus* off

Jynx ruficollis: *A. orthocentros* off *Pogoniulus erythronotos*, off *Buccanodon duchaillui*; *Calcealgus gyroplax* off *Calyptocichla serina*: *C. trichoplax* off *Arizelocichla falkensteini*: *C. margaropygus* off *Nigrita canicapillo*, off *Lagonostica rubricata*: *C. troglodygus* off *Spermophaga haematina*, **Gaud & Mouchet** (3); *Astridiella caprimulgi* off *Caprimulgus europaeus*, off *Scotornis fossi welwitschi* also of *Cosmetornis vexillarius*: *Astridiella neotis* off *Neotis cafra*: *Astridiella vitzthumi* off *Otis tarda*, **Fain** (7); *Dinalloptes anisopus* off *Phalacrocorax africanus*, **Gaud & Mouchet** (2); *Freyanomorpha diversa* off *Galachrysis nuchalis* (Glareolidae), *F. ambigua* off *Charadrius alexandrinus nigirius* (Charadriidae), **Gaud**; *Knemidokoptes pilae* off *Palaeornis torquatus* (parrakeet) and off *Ara* sp., **Jansen**; *Lemnynyssus galagoensis* in nasal cavities of *Galago senegalensis moholi*: *Yunkeracarus muris* in nasal cavities of *Arvicanthus abyssinicus rubescens*, **Fain** (1); *Ophthalmognathus dogieli* off *Ardea cinerea*, **Dubinin** (2); *Pterodectus buphagi* off *Oxpecker*, *Buphagus erythrorhynchus*: *P. delicatulus* off *Passer grisea*, **Till** (1); *Tubinoptes strandtmanni* in nasal cavities of *Larus r. ridibundus*, **Dubinin & Snegireva** (3).

Parasitism: Avian hosts: Metastigmata.—*Argas persicus* and *Ixodes* sp. off *Gambel Quail* (*Lophortyx gambelii*), **Gullion**; *Haemaphysalis wellingtoni* off grey thrush, *Turdus c. cardis*, **Asanuma & Kôsa** (4); *Hyalomma plumbeum* off *Anthus trivialis*, **Černý & Balát** (2); *Ixodes signatus* off *Larus crassirostris*, **Asanuma et al.** (5); *Ixodes tauricus* off cormorant, *Phalacrocorax aristoteles*, **Vshivkov & Filippova**; *Ixod.* of sea-birds, **Thompson**.

Parasitism: Reptilian and Amphibian hosts.—*Acomatacarus langani* in external auditory meatus of skink, *Lygosoma bicarinata*: *A. mathevi* in external auditory meatus of *Lygosoma spaldingi*, **Southcott** (3); *Acomatacarus (M.) buretti* off *Lizard*, *Riopa fernandi*, **Vercammen-Grandjean**; *Fonsecia pyasi* off *rat snake*, **Rammohan Rao & Hiregaudar**; *Hamertonia psammophis* off *grass snake* (*Psammophis sibilans trinasalis*): *Mabuyonyssus freedmani* off *pearly bushveld skink* (*Mabuya quinqueteniata maragaritifer*): *Neoli-ponyssus africanus* off *girdled lizard* (*Pseudocordylus microlepidotus*): *Neoli-*

ponyssus lawrencei off *striped skink* (*Mabuya striata*): *Neoliponyssus tropidosaurae* off *Cottrell's mountain lizard* (*Tropidosaura cottrelli*): *Ophidilaelaps capensis* off *Russet snake* (*Duberria lutrix*): *Ophionyssus mabuyae* off *striped skink* (*Mabuya striata*), **Till**; *Ixodorrhynchus gordonii* off *Natrix tigrina lateralis*, **Tibbetts & Strandtmann** (2); *Schongastia propria* off *Natrix piscator*, **Audy & Womersley** (6); *Schongastia longisetosa* and *Tragardhula najai* off *Naja naja*, **Hiregaudar** (2); *Siseca southcotti* off *Lygosoma rhomboidalis*, **Womersley & Audy** (5); *Tragardhula kwanacara* off *Nycticorax n. nycticorax*, **Chen & Hsu** (1); *Vercammenia hendricksoni* off *Rana macron*, **Audy & Nadchatram** (4); *Vatacarus ipoides* from *sea-snake*, *Laticauda laticaudata*, **Southcott** (5); *Ixodes reduvius* off *Lacerta agilis*, **Skinner**.

Parasitism: Invertebrate hosts.—*Alliphis evansi* off *Anomala transvaalensis*, off *Onitis* sp., off *Ontophagus gazella*, off *Oniticellus* sp., off *Onthophagus binodis*: *Alliphis halberti* off *Onitis* sp.: *Eviphis capensis* off *Scarabaeus bonelli*: *Eviphis hastatellus transvaalensis* off *Heliocopris hamadryas*: *Pelethiphis berlesii* off *Circellum bacchus*: *Pelethiphis eiseleni* off *Heliocopris gigas* and off *H. hamadryas*: *Pelethiphis geyeri* off *Copris elphanor*: *Pelethiphis vaneedeni* off *Heliocopris hamadryas* also off *H. gigas*: *Scarabaspis africanus*, off *Pachylomora femoratus*, **Ryke & Meyer** (1); *Copriphus spinosus* off *Bubas bison* (Coleop.), **Lombardini**; *Caloglyphus lucani* off *Lucanus cervus*: *C. novaki* off *Geotrupes vernalis* v. autumnalis, **Samsiñāk** (2); *Heastlipia gateri africana* off *Centropus grilli* (Coleopt.), **Vercammen-Grandjean & Audy** (4); *Neolobogynium lateriseta* off *Hololepta fossularis* (Coleop.), **Hicks**; *Myialges indica* off *Hippoboscidae*, *Pseudolynchia maura*, **Hiregaudar** (1); *Bonomoia humprechtii*, *Acaropsis strofi*, and *Troupeauia laphriae* off *fly*, *Laphria flava*, **Samsiñāk** (5); *Tetrathrombium macronychus* off *Tipulid*, *Ptychoptera* sp., **Feider & Suciu** (3); *Evansiella culicoides* off *Culicoides* spp. **Vercammen-Grandjean** (1); *Leptus phyllotretae*, *Teresothrombium mastigotarsum* and *T. susteri* off *Phyllotreta* spp. [Hemiptera], **Feider**; *Acotyledon tetramorii* with ants, *Tetramorium caespitum* and *Anergates atratulus*, **Samsiñāk** (9); *Hypopi* of *Anoetinae* off

insects, **Scheucher**; Tyroglyphidae off insect hosts, **Türk & Türk**; *Unionicola formosus* and *U. wolcottii* off *Anodonta* spp., **Mitchell** (2); Acar. off insect hosts, **Samšiňāk** (1).

Parasitism: Plant hosts.—*Aceria arundinis* off *Arundo* Donax: *A. boissieri* off *Genista* Boissieri: *A. cisticola* off *Cistus laurifolius*: *A. desertorum* off *Suaeda fruticosa*: *A. eupatorii* off *Eupatorium cannabinum*: *A. plantaginis* off *Plantago subulata*: *A. populi-canescantis* off *Populus canescens*: *A. suffragiosa* off *Santolina rosmarinifolia*: *Anthocoptes rubicolens* off *Rubus* sp.: *Diptacus ilicis* off *Ilex Aquifolium*: *Epitrimerus bupleuri-spinosi* off *Bupleurum spinosum*: *Phyllocoptes nevadensis* off *Euphorbia luteola*: *Phytoptus dehesae* off *Carex Goodenowii*: *Rhyncaphytoptus aisasuensis* off *Salix "aurita"*: *R. ulmicola* off *Ulmus scabra*: *Vasates cuneatus* off *Cistus lauritolius*: *V. hygrophilus* off *Hypericum tetracteryum*: *V. lepidii* off *Lepidium stylatum*: *V. querci-ilicis* off *Quercus ilex*: *V. rubiae* off *Rubia peregrina*: *V. variabilis* off *Salix daphnoides*, **Roivainen**; *Aceria litchii* on *Litchi chinensis*, **Nishida & Holdaway**; *Bryobia arborea* off apple leaves, **Morgan & Anderson**; *Dolichocybe keiferi* off *Acer palmatum*: *Siteroptes reniformis* off cotton boll, **Krantz**; *Eriophyes* sp. on sugarcane, **Puttarudriah & Usman**; *Eriophyes caricis* off *Carex Goodenowii*, **Lehtola**; *Lorryia* off citrus, **Smirnov**; *Metatetranychus ulmi* on beans, **Fritzsche et al.**; *Paratetranychus ununguis* on spruce, **Brammans** (1); *Penthaleus major* damaging grain, **Pucci**; *Phyllocoptes carinatus*, *P. theae* and *Eriophyes* sp. off tea, **Chen, J.-t.**; *Siteroptes graminum* off wheat, **Sömermaa**; *Tarsonemus pallidus* on cyclamen, **Böhm** (2); *Tetranychus telarius* damaging potatoes, **Fulton**; *Tetranychus telarius* on lemon, **Martino**; *Typhlodromus aceri* off maple, *Acer campestre* and off hazel, *Corylus avellana*: *T. scoticus* off *Salix* sp., **Collyer**; *Typhlodromus longilateralis* off *Cynodon dactylon* (Gramin.), *Typhlodromus ornatus* off *Rubus ulmifolius*, **Athias-Henriot** (1); *Typhlodromus* (*T.*) *aboreus* off apple leaves: *T.* (*T.*) *flumensis* off *Shepherdia canadensis*: *T.* (*T.*) *singularis* off Douglas fir, *ponderosa* pine, lodgepole pine, white pine, juniper, maple, *Thuya* sp., sumac, mock orange, black

cotton wood, willow, spruce: *T.* (*T.*) *validus* off *ponderosa* pine, black cotton wood, wild cherry: *T.* (*A.*) *andersoni* off prune foliage: *T.* (*A.*) *berlesei* off *Ranunculus* sp., birch: *T.* (*A.*) *desertus* off black cotton wood, willow: *T.* (*A.*) *morgani* off dandelion: *T.* (*A.*) *okanagensis* off peach foliage, "cover crop," apple leaves, burdock, **Chant**; List of hosts of *Tetranychus viennensis*, **Müller, G. F. W.**; Acar. on sugar beet, **Zverezomb-Zubovskii**; Gall mites of Netherlands, **Docters van Leeuwen**; Harmful phytophagous *Acarina* in Turkey, **Düzgünes**.

Acarina of medical importance.—*Tyroglyphus* and *Tarsonemus* in sputum of man, **Liu et al.**

Parasitism: Pentastomida.—*Armillifer pomeroyi* off *Naja haje*, off *Acrochodus granulatus*: *Armillifer armillatus* off *Hemiechinus auritus*: *Diesingia* sp. off *Engyrs carinatus*: *Kiricephalus pattoni* off *Ahaetulla calligaster*: *Megadrepanoides solomonensis* off *Varanus indicus*: *Megadrepanoides varani* off *Varanus indicus*: *Raillietiella affinis* off *Scincus officinalis*, off *Chalcides sepsoides*, off *Agama stellio*, off *Eumeces schneideri*, off *Uromastix aegyptia*, off *Lepidodactylus lugubris*: *Raillietiella gehyrai* off *Agama stellio*: *Waddycephalus teretisculus* off *Ahaetulla calligaster*, **Self & Kuntz**; In *Resus* sp., **Boch**; *Linguatula serrata* in hare, **Lucas et al.**; *Linguatula serrata* from man, **Papadakis & Hourmouziadis**.

Symbiosis.—*Dinogamasus braunsi* off carpenter bee, **Skaife**.

Commensalism.—*Conopistha trigona* with *Allepiera lemniscata*, **Lamore**.

Phoresy.—*Withius caecus* on *Tinea biskraella* (Lepid.), **Dufrane**.

Host specificity.—Among parasites, **Stammer** (1).

Host preference.—*Trombicula mitarai*, **Asanuma et al.** (8).

Host relationship.—*Neoschöngastia asakawai*, **Asanuma & Takada** (7).

Technique.—Culture of spiders, ticks and mites, **Galtsoff et al.**; Maintenance, breeding and development of *Phonetreria fera*, **Tretzel**; Examination of birds for nasal mites, **Fain** (8); Examination of tyroglyphid populations, **Melville**; Feeding of *Brevisterna utahensis*, **Allred & Marchette** (5); Rearing Trombiculids, **Vercammen-Grandjean** (2); Feeding

ticks, Řeháček; Breeding *Phyllocoptura oleivora*, Swirski & Amitai (1); Collecting mites from birds, Beer & Cook; Collecting, culture and feeding *Trombicula autumnalis*, Minter; Collecting and breeding *Ornithodoros papillipes*, Kusov; Collecting soil Acarina, Macfadyen; Extracting arthropods by suction, Johnson et al.

Behaviour. — Aganippini spiders, Main & (1); *Chaetodactylus* spp., Lith; *Brevisterna utahensis*, Allred, D. M. (4); Unengorged larval Trombiculids, Sasa et al. (6); *Trombicula deliensis*, Yu et al.

Transmission of disease, Acarina excl. Ixod. — *Aceria tulipae* vector of wheat streak-mosaic virus, Connin & Staples; *Aceria tulipae* vector of wheat streak mosaic, Gibson & Painter; *Bdellonyssus bacoti* and typhus antibodies, Smith W. M.; *Dermanyssus gallinae*, *Ornithonyssus bursa*, *O. sylviarum* with studies on St. Louis encephalitis, Chamberlain et al.; Trombidiosis by *Trombicula autumnalis*, Daniel (1); *Tyroglyphus noxius* carrier of microsporid, *Nosema steinhausi*, Weiser.

Transmission of disease: Ixodoidea. — *Rickettsia prowazeki* isolated from *Amblyomma variegatum* and *Hyalomma rufipes*, Reiss-Gutfreund; *Boophilus calcaratus* vector of haemosporidiosis, Vecherkin & Esikov; *Dermacentor andersoni* and *D. variabilis* vectors of Rocky Mt. spotted fever, Cawley & Wheeler; *Dermacentor parumapertus*, Allred et al. (7); *Rickettsia*-like bodies in *Hyalomma savignyi*, Dasgupta & Ray (2); *Ornithodoros erraticus*, Colas-Belcour & Vervent; *Ornithodoros lahorensis* and tick paralysis of sheep, Kusov (1); *Borrelia persica* transmitted by *Ornithodoros moubata*, Davis & Hoogstraal; *Ornithodoros moubata* and relapsing fever, Walton; Plague by *Ornithodoros tartakovskyi*, Burlatsenko; *Ornithodoros turicata* reservoir of rabies virus, Reagan et al.; Rôle of Ixod. in disease, Grebenok et al.; Relationship to disease of Ixod. in U.S.S.R., Anastos.

Control: Acarina: excl. Tetranychidae and Ixodoidea. — *Acarus siro*, Boczek; *Aceria sheldoni*, Hely; *Aceria sheldoni*, Martino (1); Repellent against *Bdellonyssus bacoti*, Belozerov; *Brevipalpus lewisi*, Elmer & Jeppson; *Eriophyes pyri*, Lancaster; *Eriophyes pyri*, Minder; Eriophyidae, Russo; *Halotydeus destructor* and *Penthaleus*

major, Wright; *Hemitarsonemus latus*, Hooper; *Myobia musculi*, Mariani; *Myocopes musculus*, Davis; *Psorergates simplex*, Cook; *Rhynacus gigantorhynchus* and *Vasates fockeii*, Anthon; *Steneotarsonemus pallidus*, Allen et al.; Trombiculids, Keller & Gouck; *Vasates lycopersici*, Smith & Saunders; Itch mites of sheep, Galuzo (2).

Control: Tetranychidae. — *Anychus orientalis*, Swirski; *Bryobia praetiosa*, English & Snetsinger; *Bryobia arborea* and *B. praetiosa*, Downing; *Bryobia praetiosa*, Silveira Guido & Carbonell Bruhm; *Eutetranychus banksi*, Klapperich; *Metatetranychus citri*, Spencer & Selhime; *Metatetranychus ulmi*, Fjeldalen & Stenseth; *Metatetranychus ulmi*, Madsen & Hoyt (1); *Metatetranychus ulmi*, Mathys (2); *Metatetranychus ulmi*, Massee & Austin; *Metatetranychus ulmi*, Shea; *Paratetranychus pratensis*, Malcolm; *Paratetranychus ununguis*, Brammis & (1); *Petrobia latens*, Chen, Y.-f.; *Tetranychus telarius*, Singh & Saini; *Tetranychus telarius*, Latif & Muhammad; *Tetranychus telarius*, Martino; *Tetranychus telarius*, Meltzer; *Tetranychus viennensis*, Müller, G. F. W.; *Tetranychus telarius* and *Hemitarsonemus latus*, Sherman & Tamashiro; Tetranychids on apples and pears, Madsen & Borden; Tetranychids on almonds and peaches, Summers; Tetranychids on lima beans, Wilcox & Howland; Tetranychids, Russo.

Control: Ixodoidea. — *Amblyomma americanum*, Hunter et al.; *Amblyomma americanum*, Lancaster (1); *Ixodes persulcatus*, Gadalín et al.; *Boophilus microplus*, Stone; *Argas persicus*, Rodriguez & Riehl; *Boophilus microplus*, Snowball; Lone star tick, Lancaster; Ixodidae, Blagoveshtchesky.

DISTRIBUTION PALAEARCTIC REGION

Europe.—Acar., Dosse (3).

Iceland.—Acar., Forsslund.

Great Britain.—Pantop., Pseudoscorp., Acar., Bassindale & Barrett; Pantop., Pseudoscorp., Acar., Mar. Biol. Assoc. U.K.; Pseudoscorp., Vachon; Pseudoscorp., Opil., George (1); Aran., George; Opil., Aran., Eggeling; Opil., Roewer (2); Aran., Blest; Aran., Duffey; Aran., Locket & Millidge (1); Aran., Morris; Aran., Peake; Aran., Sage; Pseudoscorp., Opil., Aran., Savory

& Le Gros; Aran., Whatnough; Acar., Collyer; Acar., Evans (2); Acar., Leatherdale; Acar., Sheals; Acar., Ver-cammen-Grandjean (1); Ixod., Thompson & (1); Tardig., Le Gros; Fair Id., Opil., Aran., Acar., Cloudsley-Thompson.

Ireland.—Acar., Stelfox.

France.—Palpig., Condé; Opil., Roe-wer (2); Aran., Bigot (1); Aran., Denis (2); Aran., Dresco; Aran., Tambs-Lyche; Acar., Grandjean (4); Acar., Schuster (1); Acar., Travé; Acar., Türk & Türk; Ixod., Euzeby; Ixod., Roman & Sicart; Hydrach., Aguesse; Hydrach., Angelier; Hydrach., Lundblad.

Luxembourg.—Aran., Muller.

Netherlands.—Opil., Spoek; Aran., Chrysanthus; Acar., Docters van Leeuwen; Hydrach., Besseling (2).

Denmark.—Acar., Haarløv; Acar., Hughes (1).

Sweden.—Aran., Kauri; Acar., Forslund (1); Acar., Sellnick (1) (3).

Finland.—Aran., Hackman (1) (2); Aran., Millidge; Acar., Karppinen; Acar., Lehtola.

Latvia, Acar., Lapin.

Portugal.—Acar., Neves & Graça; Hydrach., Lundblad.

Spain.—Acar., Grandjean (6); Acar., Knülle; Acar., Mihelčić (1) (2) (3) (4); Acar., Roivainen; Acar., Travé; Hydrach., Lundblad.

Italy.—Scorp., Marcuzzi & Fabris; Aran., Barajon; Aran., Kritscher (1); Acar., Filipponi & Cervone; Acar., Filipponi & Seganti (1); Acar., Lombardini; Acar., Starkoff (1); Ixod., Starkoff & (3) (4) (5); Hydrach., Parenzan.

Switzerland.—Aran., Stäger; Acar., Mathys; Acar., Schweizer; Hydrach., Bader; Hydrach., Lundblad; Hydrach., Schwoerbel (1).

Germany.—Arach., Pentast., Tardig., Crome (2); Opil., Roewer (2); Acar., Baring (1); Aran., Billaudelle; Aran., Braun; Acar., Dosse (7); Acar., Knülle & (1); Acar., Ritschl; Acar., Samšiňák (7); Acar., Scheucher; Acar., Türk & Türk; Acar., Willmann; Acar., Willmann in Strenzke (3); Hydrach., Ehrenberg; Hydrach., Schwoerbel; Hydrach., Viets, K. O.

Austria.—Scorp., Palpig., Strouhal; Pseudoscorp., Beier (3); Aran., Kritscher & Strouhal (2); Acar., Kepka; Acar., Mihelčić (5); Acar., Samšiňák (1); Hydrach., Lundblad.

Hungary.—Opil., Aran., Acar., Beretz et al; Acar., Kobulej (1); Hydrach., Motas et al.; Hydrach., Szalay; Tardig., Gyula.

Yugoslavia. — Acar., Djurkić (1); Ixod., Petrovitch & Simitch; Hydrach., Besseling (1); Hydrach., Georgievski.

Czechoslovakia.—Pseudoscorp., Aran., Acar., Nosek; Aran., Wolska; Acari, Beran et al.; Acar., Daniel & (1), (2), (3); Acar., Kunst; Acar., Nosek (1); Acar., Samšiňák (2), (3), (4), (5), (9); Acar., Winkler & (3); Acar., Zapletal; Ixod., Černý (1); Ixod., Černý & Balát (2); Hydrach., Láska & (1).

Poland.—Ixod., Lachmajer.

Rumania.—Acar., Feider & (1), (2); Acar., Feider & Suciú (3); Tardig., Péterfi.

Greece.—Opil., Roewer (2).

U.S.S.R.—Acar., Bulanov-Zakhvatkina (1), (2); Acar., Dubinin & Snegireva (3); Acar., Milan; Acar., Razumova; Acar., Schluger; Acar., Schulman; Acar., Visoshkaya & Bregetova; Ixod., Anastos; Ixod., Dzhapardze; Ixod., Galuzo (1); Ixod., Grebenyuk; Ixod., Kapustin; Ixod., Shustrov; Ixod., Shilova & Krylov.

Azerbaijan. — Ixod., Pospelova - Shtrom & Abusalimov; Acar., Zachvatkin.

Armenia.—Acar., Bagdasaryan & (1), (2), (3); Acar., Rekk & Bagdasaryan (4), (5).

Belorussia, SSR.—Acar., Bulgina.

Caucasus.—Aran., Charitonov; Acar., Beglarov; Ixod., Kalita & Pelipeichenko.

Crimea.—Ixod., Emchuk; Ixod., Vshivkov & Filippova.

Delta of Danube and Volga.—Acar., Dubinin (2).

Georgia SSR.—Aran., Mkheidze; Acar., Chalilova; Acar., Rekk & (1), (2), (3).

Kazakhstan.—Acar., Vainshstein; Acar., Zemskaia & Piontkovskaya; Ixod., Tselishcheva.

Siberia.—Opil., Suzuki (2).

Tadzhikistan.—Acar., Schluger.

Turkmenia.—Acar., Schluger & Myshchenko (1).

Kuril Is.—Opil., Suzuki (2).

Isle of Lampedusa.—Solif., Zavattari; Acar., Lombardini.

Sicily.—Ixd., Starkoff (2).

Crete.—Pseudoscorp., Beier (1); Opil., Roewer (2).

Cyprus.—Opil., Roewer (2).

Algerian Sahara.—Hydrach., Viets, K. O. (2).

Algeria.—Acar., Athias-Henriot & (1); Hydrach., Viets, K. O. (1).

Morocco.—Palpig., Remy (5); Solif., Panouse; Opil., Roewer (2); Acar., Perret & (1), (2); Acar., Smirnov & (1).

Egypt.—Ixd., Arthur (2); Ixd., Hoogstraal & Kaiser (2), (3); Ixd., Hoogstraal et al. (4); Pentast., Self & Kuntz.

China.—Opil., Roewer (2); Opil., Wang, F.-c.; Aran., Kritscher; Acar., Chen, J.-t.; Acar., Chen & Hsu & (1); Acar., Hsu & Chen; Acar., Hsu & Wen & (1); Acar., Jeu; Acar., Jeu & Wen (2); Acar., Liang et al.; Acar., Tung; Ixd., Arthur (3); Ixd., Pentast., Jeu (1).

Hong Kong.—Acar., Womersley (2).

Korea.—Opil., Charitonov (1); Opil., Roewer (2); Aran., Paik; Acar., Farrier; Roewer (2); Aran., Paik; Acar., Farrier; Acar., Tibbetts & Strandtmann (2); Ixd., Arthur (3); Ixd., U.S. Army 406 Med. Gen. Lab.

Manchuria.—Opil., Suzuki (1).

Mongolia.—Ixd., Filippova (1).

Japan.—Pseudoscorp., Opil., Aran., Acar., Morikawa (1); Pseudoscorp., Morikawa (2); Opil., Miyosi; Opil., Roewer (2); Opil., Suzuki; Aran., Komatsu; Aran., Kritscher; Aran., Oi; Aran., Uyemura; Aran., Yaginuma & (1); Acar., Asahina & Tada; Acar., Asanuma & (2); Acar., Asanuma et al. (3); Acar., Fujisaki; Acar., Fujita et al.; Acar., Kamo; Acar., Kamo et al. (2); Acar., Kugoh; Acar., Sasa (1); Acar., Sasa & Miura (3); Acar., Sasa & Shigai (5); Acar., Sasa et al. (2) (7); Acar., Yamaguchi; Ixd., Asanuma & Kōsaka (4); Ixd., Asanuma et al. (5), (6); Ixd., U.S. Army 406 Med. Gen. Lab.; Hydrach., Imamura & (1), (2).

Ryukyu Is.—Ixd., U.S. Army 406 Med. Gen. Lab.

Asiatic Russia.—Acar., Bulanova-Zakhvatkina (2).

Kuril Is.—Acar., Bulanova-Zachvatkina & (2).

Turkey.—Pseudoscorp., Beier (4); Opil., Roewer (2); Acar., Düzgünes; Ixd., Arthur (3).

Israel.—Aran., Kritscher; Acar., Gratz; Acar., Radford; Acar., Shulov.

Cape Verde Is.—Pseudoscorp., Vachon (3).

ORIENTAL REGION

Oriental Region.—Acar., Audy.

India.—Acar., Audy & Womersley (6); Acar., Hiregauder & (1), (2); Acar., Hiregauder & Bal. (3); Acar., Puttarudriah & Usman; Acar., Rammohan Rao & Hiregauder & (1); Acar., Traub & Morrow (1).

Pakistan.—Ixd., Abdussalam & Shaikh; Ixd., Field; Acar., Latif & Muhammad.

Himalayas.—Opil., Roewer (2).

Nepal.—Acar., Evans.

Manipur State.—Acar., Audy & Nadchatram (5).

Burma.—Opil., Roewer (2); Acar., Traub & Evans.

Malaya.—Acar., Audy & Nadchatram (4), (5); Acar., Audy & Womersley (6); Acar., Domrow (1), (2); Acar., Harrison; Ixd., Kohls (2); Acar., Traub & Evans; Acar., Traub & Morrow (1); Acar., Womersley (1).

Thailand.—Acar., Traub & Evans; Acar., Traub & Morrow.

Borneo.—Acar., Domrow (1); Ixd., Kohls (2); Acar., Traub & Evans; Acar., Traub & Morrow (1); Hydrach., Viets, K.

Celebes.—Acar., Womersley & Audy (5).

Dutch East Indies.—Aran., Kritscher.

Formosa.—Opil., Roewer (2); Ixd., Sugimoto.

Java.—Aran., Kritscher; Ixd., Kraneveld & Keidel.

Sarawak.—Acar., Traub & Evans.

South Viet Nam.—Ixd., Toumanoff & Maillard.

Sumatra.—Opil., Roewer (2); Aran., Kritscher.

Philippine Is.—Aran., Kritscher; Acar., Womersley (3).

ETHIOPIAN REGION

- Africa.—Ixod., Hoogstraal (1).
 Ashanti.—Ixod., Arthur & Burrow (7).
 Cameroons.—Aran., Kraus (4); Acar., Gaud; Acar., Gaud & Mouchet (2); Acar., Taufflieb & Mouchet (1), (3); Acar., Gaud & Till (4); Ixod., Arthur (6).
 Dahomey.—Ixod., Morel.
 Fernando Po.—Acar., Michelčič (1).
 French Equatorial Africa.—Acar., Abonnenc & Taufflieb & (1).
 Gabon.—Aran., Comellini.
 Gambia.—Acar., Taufflieb & Abonnenc.
 Ivory Coast.—Ixod., Arthur.
 Senegal.—Ixod., Morel.
 Angola.—Opil., Lawrence; Acar., Vercammen-Grandjean (3), (4).
 South West Africa.—Aran., Kraus (4); Acar., Sellnick (2).
 South Africa.—Acar., Till (2).
 Bechuanaland.—Acar., Fain (2), (7); Acar., Till.
 Cape Province.—Acar., Evans (1); Acar., Ryke & Meyer (1); Acar., Till.
 Natal.—Palpig., Remy (2); Aran., Comellini; Acar., Evans (1); Acar., Till.
 Rhodesia.—Acar., Ryke & Meyer (1); Acar., Till (1).
 Transvaal.—Aran., Comellini; Acar., Ryke; Acar., Ryke & Meyer (1); Acar., Till.
 Abyssinia.—Opil., Roewer; Aran., Comellini.
 Erythrea.—Aran., Kritscher.
 Somaliland.—Ambly., Sertorio; Ixod., Lipparoni; Ixod., Walker; Tardig., Franceschi.
 Sudan.—Aran., Denis; Acar., Vercammen-Grandjean & Brennan (5); Pentast., Self & Kuntz.
 East Africa.—Opil., Roewer (2); Aran., Comellini.
 Belgian Congo.—Aran., Comellini; Aran., Kraus (4); Aran., Schmidt (3); Acar., André; Acar., Fain (1), (3), (5), (6), (7), (8); Acar., Vercammen-Grandjean & (3); Acar., Vercammen-Grandjean & Audy (4); Acar., Vercammen-Grandjean & Fain (6), (7); Ixod., Arthur & Burrow (7).

Ruanda-Urundi.—Acar., Fain & (8); Acar., Vercammen - Grandjean & Fain (6).

Kenya.—Acar., Vercammen-Grandjean & Brennan (5); Ixod., Arthur & Burrow (7); Ixod., Walker.

Uganda.—Acar., Radford; Acar., Vercammen-Grandjean & Brennan (5).

Tanganyika.—Pseudoscorp., Beier; Ixod., Walker.

Portuguese East Africa.—Aran., Kraus (4).

Mozambique.—Opil., Lawrence (1); Aran., Comellini; Acar., Till (1); Ixod., Dias.

Madagascar.—Aran., Comellini; Aran., Minet & (1); Acar., Gretillat; Acar., Tipton; Acar., Gaud & Till (4); Ixod., Arthur (1), (6).

AUSTRALIAN REGION AND POLYNESIA

Australasian Region.—Acar., Audy.
 Bismarck Archipelago.—Acar., Womersley & Audy (5).

Indonesia.—Pentast., Seidel.

New Guinea.—Acar., Womersley (3).

Australia.—Aran., Musgrave.

Queensland.—Acar., Newton & O'Sullivan; Acar., Southcott & (3), (4); Acar., Womersley & Audy (5); Ixod., Legg et al. (1); Ixod., Mulhearn; Ixod., Snowball (1).

Victoria.—Acar., Audy & Womersley (6).

New South Wales.—Aran., Kritscher.

South Australia.—Acar., Southcott (1); Acar., Womersley (3), (4).

Western Australia.—Aran., Main & (1), (2).

Great Barrier Reef.—Acar., Domrow.

Tasmania.—Opil., Hickman.

New Zealand.—Aran., Forster; Acar., Evans (1); Acar., Whitten & Elliott.

Caroline Is.—Pseudoscorp., Beier (2); Opil., Goodnight & Goodnight; Hydrach., Cook.

Cook Is.—Aran., Marples.

Fiji Is.—Aran., Marples.

Guam.—Acar., Sengbusch.

Hawaii.—Acar., Boyle & Haramoto (1); Acar., Newell (1).

New Caledonia.—Acar., Southcott (2), (5).

Mariana Is.—Pseudoscorp., Beier (2);
Opil., Goodnight & Goodnight.

Marshall Is.—Pseudoscorp., Beier (2).

Micronesia.—Scorp., Chapin; Pseudoscorp., Beier (2); Opil., Goodnight & Goodnight; Ixod., Kohls.

Samoa.—Aran., Marples.

Society Is.—Aran., Marples.

Solomon Is.—Pentast., Self & Kuntz.

NEARCTIC REGION

Alaska.—Acar., Summers (1).

Canada.—Aran., Pengelly.

British Columbia.—Acar., Chant;
Acar., Morgan & Anderson.

Baffin Id.—Hydrach., Habeeb (1).

New Brunswick.—Hydrach., Habeeb
& (2).

Newfoundland.—Opil., Hackman.

Nova Scotia.—Aran., Dondale.

North America.—Aran., Levi (1).

Arizona.—Scorp., Stahnke; Aran.,
Levi.

California.—Uropyg., McDonald &
Hogue; Aran., Levi & (3); Acar., Cun-
liffe (1); Acar., Furman; Acar., Jameson
& Brennan; Acar., Krantz; Acar.,
Newell; Acar., Schuster; Acar., Sum-
mers (2); Ixod., Lee.

Colorado.—Aran., Levi.

Florida.—Aran., Levi & (3); Acar.,
Chant (1); Acar., De Leon (1).

Illinois.—Acar., Hanson et al.

Indiana.—Acar., Wilson.

Iowa.—Acar., Hicks.

Louisiana.—Aran., Roddy.

Michigan.—Ixod., Hays & Lawrence.

Maryland.—Aran., Lamore; Acar.,
Drummond & (1); Tardig., Curtin.

Massachusetts.—Acar., Chant. (1).

Nevada.—Acar., Higgins & Mulaik
(1).

New Jersey.—Hydrach., Habeeb (2);
Ixod., Hansens & Merrill.

New Hampshire.—Ixod., Blickle &
Conklin.

North Carolina.—Aran., Levi (3);
Acar., Farrier.

Oklahoma.—Acar., Cunliffe.

Oregon.—Acar., Higgins & Mulaik;
Acar., Newell.

Pennsylvania.—Aran., Levi (3).

Texas.—Opil., Roewer (2); Aran.,
Levi; Acar., Beer & Lang (1); Acar.,
Dean; Acar., Menzies; Acar., Tibbetts.

Utah.—Aran., Levi; Acar., Allred &
(2), (3); Acar., Allred & Roscoe (6);
Acar., Howell et al.

Virginia.—Acar., Sengbusch (1).

Washington.—Aran., Levi; Acar.,
Newell.

West Virginia.—Acar., Chant (1).

Wisconsin.—Tardig., Ramazzotti.

CENTRAL AMERICA

Central America.—Aran., Buecherl;
Aran., Levi (1).

Costa Rica.—Aran., Chickering (1);
Aran., Kritscher.

Guatemala.—Opil., Roewer (2).

Jamaica.—Aran., Chickering (2).

Martinique.—Acar., Grandjean (6).

Mexico.—Aran., Levi (1); Acar.,
De Leon; Acar., Narayan (1); Ixod.,
Barrera.

Panama.—Aran., Chickering & (3),
(4); Aran., Levi, (2).

Puerto Rico.—Acar., Fox.

Trinidad.—Acar., Tibbetts (1); Ixod.,
Kohls (1).

West Indies.—Aran., Levi (1).

SOUTH AMERICA

South America.—Aran., Buecherl.

Amazons.—Aran., Kritscher.

Argentina.—Opil., Ringuelet (1), (2);
Aran., Lagiglia; Acar., Bacigalupo &
Roveda; Acar., Grandjean (5).

Bolivia.—Aran., Zapfe.

Brazil.—Aran., Bücherl (1); Aran.,
Kraus (4); Aran., Levi, (2).

Colombia.—Uropyg., Kraus (5).

Ecuador.—Aran., Levi (2).

French Guiana.—Acar., Floch &
Fauran.

Paraguay.—Aran., Kritscher.

Peru.—Pedip., Solif., Opil., Roewer
(1); Aran., González; Aran., Levi (2);
Acar., Brennan.

Uruguay.—Opil., Ringuelet; Acar.,
Cristi; Acar., Rodriguez Gonzalez &
Tramontano.

Venezuela.—Scorp., Boyer.

Tierra del Fuego.—Tardig., Ramaz-
zotti.

GEOLOGICAL

Tertiary.—Aran., from Victoria, Hickman (1); Acar., from Victoria, Womersley.

Eocene.—Opil., Germany, Haupt (1).

Permian.—*Rhabdotarachnoides simoni* (Opil.) from Red sandstone, Haupt.

Lower Permian.—Aran., Thüringen, Müller, A. H.

Upper Carboniferous.—*Architarbus mayasi*, Germany, Nindel.

MARINE

Portugal.—Pantop., Nogueira.

Japan.—Pantop., Stock (2).

Red Sea.—Pantop., Stock (1).

South Africa.—Pantop., Stock (2).

New Zealand.—Pantop., Clark.

Venezuela.—Pantop., Stock (2).

South Georgia.—Pantop., Stock (2).

Antarctic.—Pantop., Stock.

MYRIAPODA

GENERAL LITERATURE

Nomenclature.—*Scolopendra morsitans* type of genus, Opinion 454.

Collections.—Symph. in Amsterdam Museum, Jupeau; Revision of J. Daday's Diplop., Loska.

STRUCTURE

External anatomy.—*Polyxenus lagurus*, Manton.

Integument.—Larval and post-larval mesoderm of Myriop., Dawydoff; *Scolopendra* and *Thyroglutus*, Lal & Srivastava.

Muscles.—*Polyxenus lagurus*, Manton.

Alimentary system.—Mucous segment in malpighian tubes of Symph, Juberthie-Jupeau.

Reproductive system.—*Scolopendra morsitans*, Jangi.

Special structures.—Golgi bodies in Chilop. and Diplop., Nath; Golgi bodies in spermatocytes of *Rhysida longipes*, Nath & Gupta (1).

Teratology.—*Scolopendra* sp., La Greca.

PHYSIOLOGY

Circulation.—Coagulation of blood of Chilop., Diplop., Grégoire & Jolivet.

Longevity.—*Iulus scandinavicus*, *Cylindroiulus silvarum*, *Schizophyllum sabulosum*, Barlow.

Venom.—Effects of centipede bites, Haneveld.

Locomotion.—*Lithobius forficatus* and *Julus terrestris*, Johnson; *Polyxenus*, Manton.

Luminous phenomena.—Luminescence of *Luminodesmus sequoiae* (Diplop.), Hastings & Davenport.

DEVELOPMENT

Egg: Oogenesis.—Chilop., Nath; *Thyroglutus* sp., Sharma & Chhotani.

Spermatogenesis.—*Scolopendra cingulata*, Klingel; Chilop., Diplop., Nath; *Rhysida longipes*, Nath & Gupta (1); *Polyxenus lucidus* and *P. lagurus*, Tuzet & Manier; *Spirostreptus castaneus*, *S. ibanda*, *S. virgator*, *S. fossilatus*, *Scaphiostreptus acuticonus*, *Scaph. sjostedi* *Haplothysanus emini* *Prionopetalum megalacanthum*, *Brachyspirobolus* sp., Tuzet & Manier (1).

Teratology.—*Scolopendra* sp., La Greca.

EVOLUTION

Chromosome problems.—*Otocryptops* sp., Ogawa.

ECOLOGY AND HABITS

Biology.—*Proteroiulus fuscus*, Pocker.

Ecology.—Chilop. as indicator, Ghilarov & Folkmanova; Chilop. and Diplop. in moss and lichen, Pschorn-Walcher & Gunhold.

Ecological association.—Chilop., Diplop., Symph., Paurop., associated with carrion, Bornemissza.

Ecological associations: cavernicolous.—Chilop., Diplop., Barajon; *Oroposoma ticinense* and *Polydesmus (Soleureus) rothi*, Manfredi (1); *Lithobius peregrinus picea*, *Lithobius peregrinus serbica*, *Harpolithobius anodus dentatus*, Matic.

Distribution.—*Iulus scandinavicus*, *Cylindroiulus silvarum*, *Schizophyllum sabulosum*, Barlow.

Feeding habits.—*Iulus scandinavicus*, *Cylindroiulus silvarum*, *Schizophyllum sabulosum*, Barlow; *Scolioplanes maritimus*, Blower (1); *Glomeris hexasticha*

and *Chromatojulus projectus*, part played in decomposing forest-litter floor, Gere; Feeding biology and humificative function of Diplop., Gere (1); Millipedes and soil-forming processes, Gilyarov; Diplop., attacking sugar beet, Zverezomb-Zubovskii.

Breeding habits.—*Habrodesmus massai nyassae*, Fryer.

Seasonal activity.—*Iulus scandinavicus* *Cylindroiulus silvarum*, *Schizophyllum sabulosum*, Barlow.

Massing.—*Orthomorpha gracilis* in greenhouse, Borg.

Swarming.—*Habrodesmus massai nyassae*, Fryer.

Enemies.—Nematodes parasites of *Neptunobolus hoguei* (Diplop.), Ruiz & Coelho.

Technique.—Culture of millepedes, Galtsoff et al.

DISTRIBUTION PALAEARCTIC REGION

Great Britain.—Chilop., Bassindale & Barrett; Diplop., Blower; Chilop., Eason; Chilop., Diplop., Eason (1).

Sarre.—Diplop., Sahli.

Belgium.—Diplop., De Queker.

Netherlands.—Diplop., Barlow.

Denmark.—Symph., Paurop., Haarløv; Chilop., Diplop., Lohmander.

Luxemburg.—Diplop., Pocker.

Italy.—Chilop., Diplop., Barajon.

Switzerland.—Diplop., Manfredi (1); Paurop., Remy (7).

Germany.—Chilop., Diplop., Crome (2); Diplop., Schubart (1).

Yugoslavia.—Chilop., Matic.

Hungary.—Diplop., Loska.

Czechoslovakia.—Chilop., Dobroruka & (2); Chilop., Symph., Dobroruka (1); Chilop., Diplop., Nosek.

U.S.S.R.—Chilop., Ghilarov & Folkmanova & (1); Diplop., Gilyarov.

Lampedusa.—Chilop., Manfredi.

Japan.—Chilop., Diplop., Miyoshi (1), (3); Diplop., Miyoshi, (2), (4), (5); Chilop., Diplop., Symph., Morikawa (1); Chilop., Shinohara & (1); Diplop., Takashima & Shinohara.

Taiwan Islands.—Chilop., Diplop., Wang, Y. M.

ORIENTAL REGION

Ceylon.—Symph., Fernando.

Sumatra.—Diplop., Jeekel.

AUSTRALIAN REGION AND POLYNESIA

New Guinea.—Symph., Jupeau.

Western Australia.—Paurop., Remy (3).

New Zealand.—Symph., Adam & Burtel.

Mariana Is.—Paurop., Remy (6).

New Caledonia.—Paurop., Remy (1).

Micronesia.—Paurop., Remy (6).

ETHIOPIAN REGION

French Equatorial Africa.—Diplop., Demange & (3).

French Guinea.—Diplop., Demange (4).

Ivory Coast.—Diplop., Demange (1), (2); Paurop., Remy.

Nyasaland.—Diplop., Fryer; Diplop., Turk, F. A.

Belgian Congo.—Chilop., Kraus (1); Chilop., Diplop., Kraus (2).

Natal.—Paurop., Remy (2).

NEARCTIC REGION

Ontario.—Diplop., Judd.

Florida.—Diplop., Causey (2).

North Carolina.—Diplop., Causey; Paurop., Remy (8).

Tennessee.—Paurop., Remy (8).

Virginia.—Chilop., Crabill (1).

CENTRAL AMERICA

Mexico.—Diplop., Causey; Paurop., Remy (4).

SOUTH AMERICA

Bolivia.—Diplop., Chamberlin.

Brazil.—Diplop., Schubart.

Chile.—Diplop., Chamberlin.

Colombia.—Chilop., Chamberlin (2), (3).

Ecuador.—Chilop., Chamberlin (2), (3).

Peru.—Chilop., Chamberlin (1), (2), (3); Diplop., Chamberlin; Diplop., Kraus (3); Chilop., Kraus (6).

GEOLOGICAL

Eocene.—Diplop., Germany, Haupt (1).

Tertiary.—Diplop. from Victoria, Tiegs.

ONYCHOPHORA

STRUCTURE

Special structures.—Nephridies of Onych., Gabe.

PHYSIOLOGY

Effect of light, humidity, temperature, etc.—*Peripatopsis* and *Opisthopatus*, Brinck.

ECOLOGY AND HABITS

Distribution.—General and South African, Brinck.

Behaviour.—Catching prey, defence, effect of slime, diurnal rhythm, Alexander.

DISTRIBUTION

South Africa.—Onych., Alexander; Brinck.

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†*Euproops thompsoni* redescribed p. 598 figs., Copeland.

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Garypus ornatus sp. nov. ♀ Bikini, Marshall Is. p. 20 fig., Beier (2).

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Ceratontia argentina ♂ new to Uruguay p. 283, Ringuélet.

Cezarella Mello-Leitão 1932 = *Cearinus* Roewer, 1929 p. 19, Ringuélet (1).

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Duripelta gen. nov. [Oonopidae] p. 139; type species *D. borealis* sp. nov. ♂. ♀ Wellington, New Zealand p. 139 figs.; *D. australis* sp. nov. ♂. ♀ Lewis Pass, New Zealand p. 144 figs.; *D. minuta* sp. nov. ♂. ♀ Canterbury, New Zealand p. 147 figs., **Forster.**

Dysdera Latreille 1804 placed on Official List p. 89, **Direction 66**; *D. punctoria* (Villers) 1789 placed on Official List p. 116, **Direction 67**; *D. ninnii sibyllinica* subsp. nov. ♂ Monti Sibillini, Italy p. 285 fig.; *D. ruffoi* sp. nov. ♂. ♀ Monti Sibillini, Italy p. 286 fig., **Kritscher (1).**

Enoplognatha maritima new to Netherlands p. 44, **Chrysanthus**; *E. intrepida* ♀. ♂ p. 17 figs.; *E. joshua* ♀. ♂ p. 15 figs.; *E. marmorata* ♀. ♂ p. 11 figs.; *E. ovata* ♀. ♂ p. 7 figs.; *E. selma* ♀. ♂ p. 10 figs.; *E. tecta* ♀. ♂ p. 13 figs.; *E. thoracica* ♀. ♂ p. 9 figs.; *E. wypta* ♀. ♂ p. 15 figs.; *E. camtschadalica* Kulczynski 1885 = *E. tecta* p. 13; *E. pallida* Emerton 1914 = *Nesticus pallidus* p. 6; *E. pikes* Chamberlin & Ivie 1943 = *E. intrepida* p. 18; *E. piuta* Chamberlin & Ivie 1942 = *E. joshua* p. 15; *E. rugosa* Emerton 1909 = *E. intrepida* p. 17, **Levi.**

Epeira pogisa sp. nov. ♀ Apia, Upolu, Samoa p. 394 fig., **Marples**; *E. bituberculata* (Hull 1948) = *Araneus gibbosus* p. 488, **Locket & Millidge (1).**

Eucta caudicula new to Korea p. 45, **Paik.**

Eucyrtops eremaea sp. nov. ♂. ♀ Cardinia Creek, Western Australia p. 421 fig.; *E. riparia* sp. nov. ♀. ♂ Mt. Misery, Western Australia p. 419 figs.; *E. latior* ♂ described p. 416 figs., Main.

Eupalaestrus tarsicrassus p. 399 figs.; *E. tenuitarsis* p. 400 fig., Buecherl.

Eurypelma latens p. 393 figs.; *E. rubropilosum* p. 393 figs., Buecherl.

Evarcha albaria p. 58 fig., Yaginuma.

Glyphesis servulus ♀. ♂ Wicken Fen, Cambridgeshire, new to England p. 799 fig., Blest.

Gnaphosa lugubris ♂ p. 486 fig.; *G. occidentalis* ♂ p. 486 fig., Locket & Millidge (1).

Gonatium corallipes ♀ new to Great Britain p. 484 fig.; *G. ensipotens* (Hull 1951) = *G. rubens* p. 488, Locket & Millidge (1).

Gongyliidiellum calcariferum ♂ new to Great Britain p. 484 figs., Locket & Millidge (1).

Grammostola actaeon p. 394 figs.; *G. burzaquensis* p. 395 fig.; *G. iheringii* p. 395 fig.; *G. mollicoma* p. 395 fig.; *G. pulchripes* p. 396 fig., Buecherl.

Hahnia cacuminata (Hull 1951) = *H. montana* p. 488, Locket & Millidge (1).

Hapalotremus uruguayensis p. 391 figs., Buecherl.

Hytia magister new to Korea p. 45, Paik.

Hyptiotes see *Uptiotes*, Muller.

Idiops montealegrensis p. 383 figs., Buecherl.; *I. syracus* ♂ p. 254 figs., Kritscher.

Idiosoma nigrum ♂. ♀ p. 439 fig.; *I. sigillatum* ♂. ♀ p. 438 figs., Main.

Ischnothele cranwelli p. 387 figs., Buecherl.

Juambeltzia clara p. 383 figs., Buecherl.

Kapiti gen. nov. [Oonopidae] p. 166; type species *K. obscura* sp. nov. ♂. ♀ Kapiti Id., New Zealand p. 166 figs., Forster.

Lasiadora curtior p. 400 figs.; *L. differens* p. 401 figs.; *L. difficilis* p. 401 figs.; *erythrocythara* p. 402 fig.; *L. parakybana* p. 402 fig., Buecherl.

Lathys (*Scotolathys*) *punctosparsus* sp. nov. ♀. ♂ Buttsu-ji, Hiroshima Pref., Japan p. 49 fig., Oi.

Latrodectes Canestrini & Pavesi 1869 invalid emendation of *Latrodectus* Walckenaer 1805 p. 90; *L. Walckenaer* 1805 placed on Official List. p. 87, Direction 66; *L. tredecimguttata* (Rossi) 1790 placed on Official List p. 116, Direction 67; *L. mactans*, embryology p. 35 figs., Rempel.

Lepothrix = *Phaulothrix* p. 8, Bonnet (1).

Leprolochus decoratus sp. nov. ♂. ♀ Corozal, Panama p. 1 figs., Chickering (3).

Lepthyphantes cericeus p. 54 fig., Yaginuma.

Leptoneta speciosa sp. nov. ♂. ♀ Kazaana cave, Nagano Pref., Japan p. 68 fig.; Komatsu.

Leucauge ilatele ♂ described p. 392 fig., Marples; *L. magnifica* new to Korea p. 44, Paik.

Linyphia emphana new to Korea p. 43 figs., Paik; *L. emphana* p. 54 fig. Yaginuma.

Lithyphantes lugubris F.O.P.-Cambridge 1902 syn. of *Steatoda autumnalis* p. 382; *L. venusta* Marx 1898 syn. of *Steatoda fulva* p. 391; *L. punctulata* Marx 1898 syn. of *Steatoda medialis* p. 388; *L. laetus* O.P.-Cambridge 1896 syn. nov. = *Steatoda nigrofemoratus* p. 377, Levi (1).

Lycinus longipes p. 405 fig., Buecherl.

Lycosa lugubris p. 57 fig.; *L. daisetsuzana* p. 57 fig., Yaginuma.

Magulla symmetrica p. 391 figs., Buecherl.

Marpissa vittata new to Korea p. 45, Paik.

Masirana nippara sp. nov. ♂. ♀ Nippara cave, Tokyo, Japan p. 71 fig., Komatsu.

Micaria fulgens (Hull 1955) = *Clubiona* sp. imm. prob. *brevipes* p. 488, Locket & Millidge (1).

Neoantistea sp. new to Korea p. 45 figs., Paik.

Neoscona adianta new to Korea p. 44; *N. opima* new to Korea p. 44, Paik.

Nesticus birsteini sp. nov. ♀ Wet Chosta Cave, Caucasus p. 26 fig.; *N. caucasicus* sp. nov. ♀. ♂ near Gudauty, Cave Anysh, Cave Tchlakhe, Cave Agumava, Caucasus p. 27 fig.; *N. borutzkyi* p. 23 fig.; *N. ponticus* p. 19 fig.; *N. zaitzevi* p. 21 fig., Charitonov.

Ninetis neotropica sp. nov. ♂. ♀ Recife, Brazil p. 242 figs., Kraus (4).

Oeodothorax quadripunctatus p. 54 fig., Yaginuma.

Ostearius melanopygius new record in France p. 36, Denis (2).

Paidisca camano sp. nov. ♂. ♀ Alameda Co., California p. 105 figs.; *P. missionensis* sp. nov. ♀. ♂ Nuevo Leon, Texas p. 102 figs.; *P. sarasota* sp. nov. ♀ Sarasota Co., Florida p. 105 figs.; *P. sclerotis* sp. nov. ♀ Mimbres Mts., New Mexico p. 104 figs.; *P. espulsa comb. nov.* ♀. ♂ p. 109 figs.; *P. maderae comb. nov.* ♀. ♂ p. 106 figs.; *P. pallida comb. nov.* ♀. ♂ p. 99 figs.; *P. pictipes comb. nov.* ♀. ♂ p. 102 figs.; *P. unimaculata comb. nov.* ♀. ♂ p. 106 figs.; *P. illudens* ♀. ♂ p. 110 figs.; *P. marxi* ♀. ♂ p. 111 figs., Levi.

Pamphobeteus cesteri p. 402 fig.; *P. isabellinus* p. 403 fig.; *P. roseus* p. 403 fig.; *P. sorocabae* p. 403 figs.; *P. tetraanthus* p. 403 figs., Buecherl.

Paratheridula gen. nov. [Theridiidae] p. 105; type species *P. quadrimaculata comb. nov.* for *Mysmena quadrimaculata* Banks 1896 ♀. ♂ p. 106 figs., Levi (3).

Pardosa caraiensis sp. nov. Karayasi, near Tbilis; Georgia, S.S.R. p. 297 fig.; *P. colchica* sp. nov. Dzhapana, near Batum, Georgia, S.S.R. p. 298 fig., Mkheidze.

Philodromus collinus new to Netherlands p. 45, Chrysanthus; *P. collinus* (Hull 1948, 1955) = *P. aureolus cespiticolis* p. 488; *P. usurpatrix* (Hull 1955) = *P. dispar* p. 488, Locket & Millidge (1); *P. reussii* new to Korea p. 46 fig.; *P. auricomus* new to Korea p. 47, Paik.

Pholcomma barnesi sp. nov. ♂. ♀ Bucks Co., Pennsylvania p. 114 figs.; *P. carota* sp. nov. ♂ Carteret Co., North Carolina p. 113 figs.; *P. gibbum* p. 110 figs.; *P. hirsuta* p. 110 figs., Levi (3).

Pholcus affinis p. 57 fig., Yaginuma.

Phoneutria fera breeding and development p. 74 figs., Tretzel.

Phormictopus cancerides p. 398 figs., Buecherl.

Phoroncidia splendida ♂ p. 270 fig., Kritscher.

Phrurolithus claripes p. 59 fig., Yaginuma.

Porrhomma egeria, stridulating organ p. 487 fig., Locket & Millidge (1).

Pounamua gen. nov. [Oonopidae] p. 151; type species *P. vulgaris* sp. nov. ♂. ♀ Lake Te Au, New Zealand p. 151 figs.; *P. complexa* sp. nov. ♂. ♀ Fiordland, New Zealand p. 163 figs.; *P. hollowayi* sp. nov. ♂. ♀ Tararua Range, New Zealand p. 160 figs.; *P. hornabrooki* sp. nov. ♂. ♀ Fiordland, New Zealand p. 156 figs.; *P. totara* sp. nov. ♂. Manawatu, New Zealand p. 158 figs.; *P. vulgaris ramsayi* subsp. nov. ♂ Fiordland, New Zealand p. 154 figs., Forster.

Prodidomus bicolor sp. nov. ♀ Archipel de Suakin, Red Sea, Sudan p. 446 fig., Denis.

Prosopotheca corniculans (Hull 1948) = *Gonylidium rufipes* p. 488, Locket & Millidge (1).

Psalistops auripilus p. 388 fig., Buecherl.

Pseudohomoeomma fasciatum p. 391 figs., Buecherl.

Pycnothele perditia p. 405 fig., Buecherl.

Rachias dispar p. 383 figs., Buecherl.

Robertus = *Ctenium* p. 485, Locket & Millidge (1).

Sarutana gen. nov. [Leptonetidae] p. 70; type species *S. glabra* sp. nov. ♂ Sarutadō cave, Shikoku Id., Japan p. 70 fig., Komatsu.

Savaia gen. nov. [Salticidae] p. 388; type species *S. punctata* sp. nov. ♀ Savaii, Western Samoa p. 388 fig., Marples.

Scotinella dixiana sp. nov. ♀. ♂ East Baton Rouge Parish, Louisiana p. 288 figs., Roddy.

Scytodes affinis ♂ p. 262 fig., Kritscher.

Sericopelma fallax p. 403 figs., Buecherl.

Spermophora sp. new to Korea p. 43 fig., Paik.

Spheropistha gen. nov. [Theridiidae] p. 14; type species *S. melanosoma* sp. nov. ♀ Okawamura, Japan p. 15 fig., Yaginuma (1).

Smeringopina **gen. nov.** [Pholcidae: Smeringopodinae] p. 233; type species *S. beninensis* **sp. nov.** ♂. ♀ Benin, West Africa p. 236 figs.; *S. camerunensis* **sp. nov.** ♂ Duala, Cameroons p. 237 figs.; *S. simplex* **sp. nov.** ♂. ♀ Esosung, Cameroons p. 238 figs.; *S. africana* p. 236; figs.; *S. armata* p. 234 figs.; key to species p. 233, **Kraus (4).**

Smeringopus peregrinoides **sp. nov.** ♂ Ruanda: ♀ Bukoba, Belgian Congo p. 224 figs.; *S. roeweri* **sp. nov.** ♂ Ruanda, Belgian Congo p. 226 figs.; *S. sambesicus* **sp. nov.** ♂. ♀ Shire River, Zambesi, Portuguese East Africa p. 228 figs.; *S. similis* **sp. nov.** ♂. ♀ Okahandja, South West Africa p. 230 figs.; *S. lesserti* **sp. nov.** ♂. ♀ Malela, Belgian Congo p. 222 figs.; *S. atomarius* p. 229 figs.; *S. hypocrita* p. 232 figs.; *S. pallidus* p. 219 figs.; *S. peregrinus* p. 223 figs.; key to species p. 217, **Kraus (4).**

Spermophora longiventris ♂ p. 263 figs., **Kritscher.**

Steatoda saltensis **sp. nov.** ♀ El Salto, Mexico p. 381 figs.; *S. mexicana* **nom. nov.** pro *Stearodea americana* F.O.P.-Cambridge 1902 non *S. americana* Emerton: pro *S. americana* Petrunkevitch 1911: pro *S. grandis* Chamberlin & Ivie 1935 non *S. grandis* Banks p. 417; *S. americana* **comb. nov.** pro. *Asagena americana* Emerton 1882 p. 400; *S. autumnalis* **comb. nov.** pro *Lithyphantes autumnalis* Banks 1898 p. 382 figs.; *S. albomaculata* **comb. nov.** pro *Aranea albomaculata* De Geer 1778 p. 396 figs.; *S. fulva* **comb. nov.** pro *Lithyphantes fulvus* Keyserling 1882 p. 391 figs.; *S. medialis* **comb. nov.** pro *Lithyphantes medialis* Banks 1898 p. 388 figs.; *S. moesta* **comb. nov.** pro *Asagena moesta* O.P.-Cambridge 1896 p. 379 figs.; *S. nigrofemorata* **comb. nov.** pro *Lithyphantes nigrofemorata* Keyserling 1882 p. 377 figs. *S. pulcher* **comb. nov.** pro *Lithyphantes pulcher* Keyserling 1882 p. 393 figs.; *S. quadrimaculata* **comb. nov.** pro *Asagena quadrimaculata* O.P.-Cambridge p. 385 figs.; *S. quaesita* **comb. nov.** pro *Lithyphantes quaesitus* O.P.-Cambridge p. 381 figs.; *S. septemmaculata* **comb. nov.** pro *Lithyphantes septemmaculatus* Keyserling 1884 p. 402 figs.; *S. transversa* **comb. nov.** pro *Lithyphantes transversa* Banks 1898 ♀ p. 383 figs.; *S. triangulosa* ♂ ♀ p. 407 figs.; *S. bipunctata* ♂. ♀ p. 413 figs.; *S. atascadera* ♂. ♀ p. 419

figs.; *S. borealis* ♂. ♀ p. 422 figs.; *S. castanea* ♀. ♂ p. 410 figs.; *S. grandis* ♀. ♂ p. 415 figs.; *S. hespera* ♀. ♂ p. 420 figs.; *S. grossa* ♀. ♂ p. 404 figs.; *S. palomara* ♀. ♂ p. 419 figs.; *S. merula* Fox 1940 = *S. grandis* p. 415; *S. zionis* Chamberlin & Ivie 1935 = *S. grandis* p. 415; key to *S. bipunctata* group p. 412; key to *S. fulva* group p. 387, **Levi (1).**

Storena (?) *bradleyi* ♀ p. 264 figs.; *S. hilaris* ♂ p. 265 figs.; *S. melanognatha* ♂ p. 266 figs.; *S. sciophana* ♂ p. 268 figs.; *S. sobria* ♀ p. 269 fig., **Kritscher.**

Strinatinnella **gen. nov.** [Dictynidae] p. 448; type species *S. spinosa* **sp. nov.** ♀ Long Island, Archipel de Suakin, Red Sea, Sudan p. 448 fig., **Denis.**

Subantarctica dugdalei **sp. nov.** ♂. ♀ Canterbury, New Zealand p. 91 figs.; *S. fiordensis* **sp. nov.** ♂. ♀ Fiordland, New Zealand p. 94 figs.; *S. florum* **sp. nov.** ♂. ♀ Nelson, New Zealand p. 97 figs.; *S. stewartensis* **sp. nov.** ♂. ♀ Stewart Is., New Zealand p. 99 figs.; *S.* transferred to *Oonopidae* p. 89, **Forster.**

Talanites (?) *atscharica* **sp. nov.** Batum, Georgia, S.S.R. p. 300 fig., **Mkheidze.**

Tegenaria pontica **sp. nov.** ♀ Phanagoria Cave, Caucasus p. 25 fig., **Charitonov**; *T. deroueti* **sp. nov.** ♂ in grotte Cova Bastera, Villefranche, France p. 212 figs.; *T. antrorum* ♀ p. 212 fig.; *T. atrica* ♂. ♀ p. 216 figs.; *T. saeva* ♂. ♀ p. 216 figs., **Dresco.**

Tekellina **gen. nov.** [Theridiidae] p. 107; type species *T. archboldi* **sp. nov.** ♂. ♀ Dale Co., Florida p. 107 figs., **Levi (3).**

Tetragnatha tristani p. 2 figs., **Chickering (1)**; *T. exigua* **sp. nov.** ♂. ♀ Hanover, Jamaica p. 3 figs.; *T. visenda* **sp. nov.** ♂ St. Catherine, Jamaica p. 7 figs.; *T. parva* ♂ p. 8 figs.; *T. versicolor* ♂ p. 8 figs., **Chickering (2)**; *T. fragilis* **sp. nov.** ♂. ♀ Barro Colorado Id., C.Z. p. 317 figs.; *T. gertschi* **sp. nov.** ♂. ♀ El Volcan, Chiriqui, Panama p. 321 figs.; *T. mabelae* **sp. nov.** ♂ Barro Colorado Id., C.Z. p. 330 figs.; *T. sinuosa* **sp. nov.** ♂ Summit, C.Z. p. 340 figs.; *T. antillana* ♂. ♀ p. 306 figs.; *T. cognata* ♂. ♀ p. 310 figs.; *T. confraterna* ♂. ♀ p. 312 figs.; *T. ethodon* ♂ p. 316 figs.; *T. guatemalensis* ♂. ♀ p. 326 figs.; *T. laboriosa* ♂. ♀

p. 329 figs.; *T. mexicana* ♂ p. 333 figs.; *T. pallescens* ♂. ♀ p. 336 figs.; *T. pallida* ♂. ♀ p. 338 figs.; *T. tenuis* ♀ p. 342 figs.; *T. tenuissima* ♂. ♀ p. 344 figs.; *T. tropica* ♂. ♀ p. 347 figs.; *T. vermiformis* ♂. ♀ p. 349 figs.; key to ♂♂ and ♀♀ in Panama p. 303, Chickering (4); *T. squamata* new to Korea p. 45, Paik.

Teutana nesiotis Chamberlin 1924 syn. of *Steatoda fulva* p. 391; *T. modesta* Bryant 1948 syn. of *Steatoda grossa* p. 405; *T. zonata* Keyserling 1882 syn. of *Steatoda grossa* p. 405, Levi (1).

Thanatus arenarius (Hull 1948, 1955) = *Philodromus aureolus* p. 488; *T. formicinus* (Hull 1955) = *Philodromus aureolus* p. 488, Locket & Millidge (1).

Theridion agrifolae sp. nov. ♀. ♂ Seattle, Washington p. 84 figs.; *T. arizonense* sp. nov. ♀ Cochise Co., Arizona p. 49 figs.; *T. cameronense* sp. nov. ♀ Cameron Co., Texas p. 40 figs.; *T. cowlesae* sp. nov. ♀ Los Angeles, California p. 31 figs.; *T. dilutum* sp. nov. ♀. ♂ Hidalgo Co., Texas p. 37 figs.; *T. goodnightorum* sp. nov. ♀. ♂ Costilla Co., Colorado p. 41 figs.; *T. hidalgo* sp. nov. ♀. ♂ Starr Co., Texas p. 43 figs.; *T. istokpoga* sp. nov. ♀. ♂ Monroe Co., Florida p. 67 figs.; *T. kawea* sp. nov. ♀ Three Rivers, California p. 48 figs.; *T. llano* sp. nov. ♀. ♂ Llano, Texas p. 28 figs.; *T. michelbacheri* sp. nov. ♀. ♂ Siskiyou Co., California p. 48 figs.; *T. myersi* sp. nov. Fort Myers, Florida p. 31 figs.; *T. timpanogos* sp. nov. ♀ Timpanogos, Utah p. 31 figs.; *T. alabamense* ♀. ♂ p. 58 figs.; *T. albidum* ♀. ♂ p. 82 figs.; *T. antonii* ♀ p. 60 figs.; *T. atropunctatum* ♀. ♂ p. 66 figs.; *T. aurantium* ♀. ♂ p. 93 figs.; *T. australe* ♀. ♂ p. 41 figs.; *T. berkeleyi* ♀. ♂ p. 52 figs.; *T. californicum* ♀. ♂ p. 84 figs.; *T. cinctipes* ♀ p. 29 figs.; *T. cynicum* ♀ p. 39 figs.; *T. cheimatos* ♀. ♂ p. 96 figs.; *T. differens* ♀. ♂ p. 32 figs.; *T. dividuum* ♀. ♂ p. 25 figs.; *T. dulcineum* ♀. ♂ p. 26 figs.; *T. flavonotatum* ♀. ♂ p. 34 figs.; *T. frondeum* ♀. ♂ p. 81 figs.; *T. geminipunctum* ♀. ♂ p. 43 figs.; *T. hobbsi* ♀. ♂ p. 62 figs.; *T. impressum* ♀. ♂ p. 89 figs.; *T. intervallatum* ♀. ♂ p. 64 figs.; *T. intritum* ♀. ♂ p. 35 figs.; *T. jeanae* ♀. ♂ p. 79 figs.; *T. laurencei* ♀. ♂ p. 71 figs.; *T. leechi* ♀. ♂ p. 74 figs.; *T. lowriei* ♀ p. 98 figs.; *T. lyricum* ♀. ♂

p. 89 figs.; *T. melanurum* ♀. ♂ p. 55 figs.; *T. montanum* ♀. ♂ p. 71 figs.; *T. murarium* ♀. ♂ p. 22 figs.; *T. neomexicanum* ♀. ♂ p. 76 figs.; *T. neshamini* sp. nov. ♂. ♂ Bucks Co., Pennsylvania p. 88 figs.; *T. ohlerti* ♀. ♂ p. 98 figs.; *T. ornatum* ♀. ♂ p. 50 figs.; *T. orlando* ♀. ♂ p. 87 figs.; *T. pennsylvanicum* ♀. ♂ p. 85 figs.; *T. petraeum* ♀. ♂ p. 24 figs.; *T. petrense* ♀ p. 81 figs.; *T. pictipes* ♂. ♀ p. 77 figs.; *T. positivum* ♀. ♂ p. 68 figs.; *T. punctipes* ♀. ♂ p. 75 figs.; *T. punctosparsum* ♀. ♂ p. 61 figs.; *T. rabuni* ♀. ♂ p. 28 figs.; *T. rufipes* ♀. ♂ p. 56 figs.; *T. saanichum* ♀. ♂ p. 70 figs.; *T. sarde* ♂ p. 30 figs.; *T. sexpunctatum* ♀. ♂ p. 91 figs.; *T. simile* ♀. ♂ p. 53 figs.; *T. submissum* ♂ p. 38 figs.; *T. tinctum* ♀. ♂ p. 61 figs.; *T. transgressum* ♀ p. 47 figs.; *T. varians* ♀. ♂ p. 52 figs.; *T. maxillare* Emerton 1913 = *T. petraeum* p. 24; *T. maxillatum* Roewer 1942 = *T. petraeum* p. 24; *T. rugosum* Archer 1950 = *Enoplognatha intrepida* p. 18, Levi; *T. kraussi* sp. nov. ♀ Kolo-i-Suva, Viti Levu, Fiji Is. p. 391 fig., Marples; *T. bomae* sp. nov. ♀ introduced into Germany from Belgian Congo p. 282 figs., Schmidt (3); *T. neglectum* new to Netherlands p. 45, Chrysanthus; *T. melanurum* ♂. ♀ p. 481 fig.; *T. neglectum* ♂. ♀ new to Great Britain p. 481 fig., Locket & Millidge (1); *T. ferrum-equinum* p. 45 figs., Oi; *T. pinastri* new to Korea p. 43 figs., Paik; *T. pictum* p. 53 fig.; *T. yunohamense* p. 53 fig., Yaginuma.

Thomisus albertianus subsp. verrucosus subsp. nov. ♀ Flandria, Congo Belge p. 2; *T. albertianus* ♀ p. 1 figs.; *T. anthobioides* var. *mongbwalensis* var. nov. ♀ Mongbwalu, Congo Belge p. 4 fig.; *T. anthobioides* ♀ p. 4 fig.; *T. australis* sp. nov. ♂ Drakensberg Mts., Natal p. 6 figs.; *T. congoensis* sp. nov. ♂ Congo Belge p. 9 figs.; *T. dartevellei* sp. nov. ♀ Mahagi, Congo Belge, also Abyssinia p. 10 figs.; *T. dottrensi* sp. nov. ♂ Lukafu, Congo Belge p. 10 figs.; *T. gabonensis* sp. nov. ♂ Gabon p. 13 figs.; *T. janinae* sp. nov. ♀ Katana, Congo Belge p. 16 figs.; *T. madagascariensis* sp. nov. ♀ Madagascar p. 17 fig.; *T. madagascariensis* var. *pallida* var. nov. ♀ Madagascar p. 18; *T. mossambicus* sp. nov. ♀ Shilowana, Mosambique p. 20 figs.; *T. mossambicus*

var. *weidneri* var. nov. ♀ Johannesburg, Transvaal p. 20 fig.; *T. roeweri* sp. nov. ♀ Kibonoto, East Africa p. 21 figs.; *T. schoutedeni* sp. nov. ♂ Matadi, Congo Belge p. 22 figs.; *T. albohirtus* ♀ p. 2 figs.; *T. anthobius* ♀ p. 5 figs.; *T. boesenbergi* ♂ p. 8 fig.; *T. daradioides* ♀ p. 10 figs.; *T. ghesquierei* ♀ p. 14 fig.; *T. hilarulus* ♂. ♀ p. 14 figs.; *T. natalensis* ♀ p. 21 fig.; *T. schultzei* ♀ p. 24 figs.; *T. scrupeus* ♀ p. 26 figs.; *T. spiculosus* ♀ p. 27 figs.; *T. spinifer* ♀ p. 27 figs.; *T. stenningi* ♀ p. 29 figs.; *T. sus* ♂ p. 30 figs.; *T. urbensis* ♀ p. 31 fig.; *T. zuluwanus* ♂ p. 32 fig., Comellini; *T. albus* = *T. onustus* p. 9; Bonnet (1).

Tibellus punctata (Hull 1955) = *T. oblongua* p. 488 Locket & Millidge (1).

Tidarren fordum ♀. ♂ p. 73 figs.; *T. mixtum* ♀ p. 72 figs.; *T. sisypoides* ♀. ♂ p. 70 figs., Levi (2); *T. levii* sp. nov. ♀ introduced into Germany from Belgian Congo p. 283 figs., Schmidt (3).

Titanoeca quadriguttata p. 203 figs.; *T. tristis* p. 205, Muller.

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Favettea heteroclyta ♀ p. 505 fig., Gaud & Mouchet (3).

Feltria (s. str.) *conica* sp. nov. ♂. ♀ Aioi City, Hyogo Prefecture, Japan p. 360 figs.; *F. (s. str.) miurai* sp. nov. ♂. ♀. N. Aioi City, Hyogo Prefecture, Japan p. 362 figs., Imamura (1); *F. (Feltriella) rubra* p. 236 figs.; *F. (s. str.) armata* ♂. ♀ p. 238 figs.; *F. (s. str.) cornuta* ♀ p. 236 fig.; *F. (s. str.) minuta* ♂. ♀ p. 238 figs.; *F. (s. str.) setigera* ♂. ♀ p. 243 figs.; *F. (s. str.) zschokkei* ♂ p. 241 fig.; *F. (s. str.) zschokkei* var. *brevidentata* var. nov. ♂

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Gahrlepiea (*Walchia*) *chinensis* sp. nov., larva off *Rattus norvegicus*, China p. 137 figs.; *G. (W.) chinensis* var. *oligoseta* var. nov. larva, China p. 138 figs.; *G. (W.) pacifica* sp. nov. larva off *Rattus norvegicus*, China p. 137 figs.; *G. (Schöngastiella) lui* sp. nov. larva, China p. 139 figs., Chen & Hsu; *G. (G.) yangchenensis* sp. nov. larva off *Suncus murinus*, *Rattus flavipectus* and *R. norvegicus*, Canton, China p. 396 figs.; *G. (Walchia) koi* sp. nov. larva off *Rattus flavipectus*, Kunming, Yunnan p. 398 figs., Chen & Hsu (1); *G. (Walchia) neosinensis* sp. nov. larva off *Rattus* sp., Chekiang Province, China pp. 450 and 460 figs.; key to species p. 452, Hsu & Wen (1); *G. (Walchia) alpestris* sp. nov. larva off

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Haemolaelaps macheratus sp. nov. ♀ Green Ant Is., Great Barrier Reef p. 207 figs., Domrow; *H. dogieli* sp. nov. ♀. ♂ off *Sicista betulina*, (forest mouse), Karelia, USSR p. 95 figs., Schulman.

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Hamertonia psammophis sp. nov. ♀ off grass snake (*Psammophis sibilans trinasalis*), Ventersdorp, Transvaal p. 138 figs.; key to females p. 136, Till.

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Hemilaelaps Ewing 1933 = *Ixodorrhynchus* Ewing 1922 p. 266, Tibbetts & Strandtmann (2).

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Histiogaster oudemansi sp. nov. deutonym. off *Ips* sp. and off *Xyleborus monographus*, France and Germany p. 144 fig.; *H. stammeri* sp. nov. ♀. ♂ Erlangen, Germany p. 142 figs.; *H. carpio* deutonym. off *Schizophyllum sabulosum* and off *Scolytus scolytus*, ♀. ♂ p. 140 figs., Türk & Türk.

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Holcothrombidium congoensis sp. nov. Lovoi, Katanga, Belgian Congo p. 327 fig., André.

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Holostaspis posteroarmatus Berlese 1904 syn. of *Macrocheles muscaedomesticae* (Scopoli) 1772 p. 25, **Filipponi & Cervone**.

Humorobates zumpti sp. nov. Namib, Southwest Africa p. 250 figs., **Sellnick** (2).

Hyalomma (*Hyalomma*) *hussaini* ♂. ♀ p. 52 figs.; *H. (H.) kumari* ♂. ♀ p. 53 figs.; *H. (H.) rhipicephaloides* ♂. ♀. N. L. p. 47 figs.; Revision of *H. (H.)* with key to species p. 46; *H. (H.) lewisi* syn. of *H. truncatum* p. 57, **Feldman-Muhsam**.

Hydrachna (s. str.) *inversa* ♂ p. 18 figs.; *H. (s. str.) schneideri integra* ♂. ♀ p. 20 figs. *H. (D.) globosa juncta* ♀. ♂ p. 23 figs.; *H. (D.) rubicunda* ♂ p. 22 figs.; *H. (R.) processifera* ♀. ♂ p. 24 figs., **Lundblad**.

Hydrodroma torrenticola ♂. ♀ p. 60 fig., **Lundblad**.

Hydrovolzia (s. str.) *cancellata* ♂ p. 17 fig.; *H. (s. str.) placophora* ♂ p. 17 fig., **Lundblad**.

Hydrozetes lacustris, *H. lemnae*, *H. thienemanni* new to Denmark p. 39, **Haarløv**.

Hydryphantes (s. str.) *dispar* ♀ p. 46 figs.; *H. (s. str.) flexuosus* ♂ p. 47 fig., **Lundblad**.

Hygrobates calliger ♂. ♀ p. 182 fig.; *H. fluviatilis* ♂. ♀ p. 183 fig.; *H. foreli* ♂. ♀ p. 181 figs.; *H. longiporus* ♂ p. 181 fig.; *H. nigromaculatus* ♂ p. 182 fig., **Lundblad**.

Hypoaspis womersleyi sp. nov. ♀. ♂ Green Ant Is., Great Barrier Reef p. 205 figs., **Domrow**; *H. myrmophilus* var. *novus* var. nov. ♀ Rome, Italy p. 288, **Lombardini**.

Hypochthonius luteus new to Denmark p. 39, **Haarløv**.

Hypodamaeus subgen. nov. see *Damacus*, **Bulanova-Zakhvatkina** (1).

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Ichoronyssus vespertilionis Kolenati 1858 rejected and invalid p. 92, **Direction** 66.

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Ixodorhynchus gordonii Tibbetts sp. nov. ♀ off *Natrix tigrina lateralis*, Seoul, Korea p. 267 figs.; *I.* synonymy discussed p. 266, Tibbetts & Strandtmann (2).

Joelia flori, redescribed p. 450 figs., Grandjean (2).

Johnstoniana latiscuta sp. nov. ♀. L. Lassen Volcanic Park, California p. 426 figs., Newell; *J. errans* p. 1463 figs.; *J. insignia* p. 1465 figs., Milan.

Kawamuracarus elongatus ♀ p. 355 fig., Imamura (1).

Knemidokoptes pilae off *Palaeornis torquatus* (parrakeet) and off *Ara* sp. p. 160 figs., Jansen.

Koenikea rutae p. 36 figs., Lundblad (1).

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Labidophorus postneri sp. nov. deutonym. Erlangen, Germany p. 206 fig.; *L. oudemansi* nom. nov. pro *Dermacarus crameri* Oudemans 1914 p. 205 fig.; *L. dispar* ♀. ♂. N. p. 198 figs.; *L. hypudaei* ♀. ♂. N. p. 200 figs.; *L. sciurinus* deutonym p. 205 fig.; *L. soricis* deutonym p. 205 fig.; *L. talpae* ♀. ♂. N. p. 197 figs., Türk & Türk.

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♂. ♀ p. 90 figs.; *L.* (s. str.) *maglioi* ♀ p. 102 figs.; *L.* (s. str.) *oblonga* ♂ p. 86 figs.; *L. pusilla* ♀. ♂ p. 83 figs. *L.* (s. str.) *rufipes* ♂. ♀ p. 92 figs.; *L.* (s. str.) *rufipes reticulatus* ♀ p. 95 figs.; *L.* (s. str.) *rufipes westfalica* ♀. ♂ p. 96 figs.; *L.* (s. str.) *shadini* ♀ p. 88 figs.; *L.* (s. str.) *sparsicapillata* ♂ p. 89 figs.; *L.* (*Pseudolebertia*) *lusitanica* sp. nov. ♂. ♀ Bussaco, Portugal p. 110 figs.; *L.* (*P.*) *glabra* ♂. ♀ p. 106 figs.; *L.* (*P.*) *salebrosa* ♂. ♀ p. 112 figs.; *L.* (*P.*) *zschokkei* ♂. ♀ p. 109 figs.; *L.* (*Hexalebertia*) *sefvei* var. *aberrimpalpis* var. nov. ♀ S. Bernardino, Switzerland p. 112 fig.; *L.* (*H.*) *tenuicollis* var. *excellens* var. nov. ♂ Andermatt, Switzerland p. 118 fig.; *L.* (*H.*) *cuneifera* ♂. ♀ p. 115 fig.; *L.* (*H.*) *dubia* ♂ p. 122 figs.; *L.* (*H.*) *semireticulata* ♀ p. 121 fig.; *L.* (*H.*) *sefvei* ♀ p. 119 fig.; *L.* (*H.*) *stigmatifer* p. 114 figs.; *L.* (*H.*) *stigmatifer* var. *separata* p. 115 fig.; *L.* (*H.*) *tenuicollis* ♀ p. 117 fig.; *L.* (*Mixolebertia*) *densa* ♂ p. 123 figs.; *L.* (*Pilolebertia*) *bucovinensis* ♂ p. 133 fig.; *L.* (*P.*) *inaequalis* ♂ ♀ p. 129 figs.; *L.* (*P.*) *insignis* ♂. ♀ p. 127 figs.; *L.* (*P.*) *insignis* var. *porosa* ♂. ♀ p. 128 figs.; *L.* (*P.*) *insignis* var. *saxonica* ♂. ♀ p. 127 figs., Lundblad; *L. elsteri* sp. nov. ♂. ♀ Saig, Switzerland p. 161 figs., Schwoerbel (1); *L.* (s. str.) *elongata* sp. nov. ♂. ♀. N. Utrecht, Netherlands p. 46 fig., Besseling (2).

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p. 53 figs.; *L. reticulatus* sp. nov. ♀ Queenstown, New Zealand p. 54 figs.; key to species p. 46; *L. macquariensis* comb. nov. pro *Pachylaelaps m. Womersley* 1937 p. 46, Evans (1).

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Lundbladia (*Octolundbladia*) *ladakiana* Vitzthum 1942 = *Trichothyas* (*Kasmirothyas*) *hutchinsoni* (Lundblad) 1934 p. 1 figs., Viets, K. (2).

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Parasitus fimetorum p. 113 fig., Götze & Hirschmann.

Parasoldanellonyx typhlops japonicus subsp. nov. ♀ Nishihara-machi, Ibaraki Pref., Japan p. 60 fig., Imamura.

Paratetranychus biotae ♀ . ♂ p. 109 fig.; *P. brevipilosus* ♀ . ♂ p. 112 fig.; *P. buschi* ♀ . ♂ p. 111 fig.; *P. kobachidzei* ♀ . ♂ p. 105 fig.; *P. longiclavatus* ♀ . ♂ p. 105 fig.; *P. piceae* ♀ . ♂ p. 108 fig.; *P. pini* ♀ . ♂ p. 109 fig.; key to species p. 104, Bagdasaryan; *P. biotae* sp. nov. Georgia, SSR. p. 176; *P. longiclavatus* sp. nov. Georgia SSR p. 177; *P. piceae* sp. nov. Georgia SSR. p. 177, Rekk (1); *P. ununguis*, morphology and habits p. 159 fig., Brammans (1).

Partnunia angusta ♂ p. 45 figs., Lundblad.

Passalozetes vicinus sp. nov. loc.? p. 25 fig.; systematics of genus discussed p. 24, Mihelčič; *P. reticulatus* sp. nov. Alcalá de Henares, Central Spain p. 67 fig.; *P. vicinus* sp. nov. El Escorial, Spain p. 68, Mihelčič (3); *P. permixtus* sp. nov. Ötztaler Alpen, Tirol p. 112 fig., Mihelčič (5); *P. perforatus* new to Denmark p. 43 fig., Haarløv.

Passerrhinoptes andropadi ♀ . ♂ p. 30 figs., Fain (8).

Pelethiphis berleseii sp. nov. ♀ off *Circellum bacchus*, Brakkloof, Transvaal p. 609 figs.; *P. eiseleni* sp. nov. ♀ off *Helicopris gigas*, Potchefstroom, Transvaal, also off *H. hamadryas* p. 613 figs.; *P. geyeri* sp. nov. ♂ off *Copris elphanor*, Potchefstroom, Transvaal p. 611 figs.; *P. vaneedeni* sp. nov. ♂ . deutonym. off *Helicopris hamadryas*, Potchefstroom, Transvaal, also off *H. gigas* p. 611 figs.; *P. rufescens* p. 606 figs.; key to

South African species p. 606, Ryke & Meyer (1); *P. equestris* new to Britain on *Geotrupes stercorarius* p. 415, Evans; *P. sculus* p. 115 fig., Götze & Hirschmann.

Pelops diversus sp. nov. Guadarrama Mts., Spain p. 54 fig.; *P. fusiger* sp. nov. Navacerrada, Spain p. 55 fig.; *P. gibbus* sp. nov. Madrid, Spain p. 56 fig.; *P. variatus* sp. nov. Salamanca, Spain p. 53 fig.; *P. acromius* p. 57 fig.; *P. bilobus* p. 61 fig.; *P. nepotulus* p. 59 fig.; *P. subexutus* p. 60 fig.; key to species groups p. 61, Mihelčič (1); *P. occultus* new to Denmark p. 44 fig., Haarløv.

Pelotulus gibbus sp. nov. Sierra Nevada, Spain p. 63 fig.; *P. reticulatus* sp. nov. between Thymusstauden and Aranjuez, Spain p. 62 fig., Mihelčič (1).

Peloribates alatus sp. nov. Madrid, Spain p. 114 fig., Mihelčič (4).

Pelzneria gen. nov. [Tyroglyphidae: Anoetinae] p. 347; type species *Anoetus crenulatus* Oudemans 1909 p. 347 figs.; *P. necrophori* ♀ . N. p. 349 fig., Scheuchter.

Penthaleus crinitus sp. nov. ♀ Morelos, Mexico p. 111 figs.; Narayan (1); *P.* sp. new to Denmark p. 30, Haarløv.

Penthalodes ovalis new to Denmark p. 30, Haarløv.

Pergamasellus gen. nov. [Parasitidae]. p. 217; type species *P. delicatus* sp. nov. ♀ Great Britain p. 217, Evans (2).

Pergamasus brevicornis and *P. runciger* new to Denmark p. 19, Haarløv.

Periglischrus strandtmanni sp. nov. ♀ . ♂ off bat (*Mormoops megalophylla senicula*), Uvalde Co., Texas p. 14 figs.; key to species p. 14 figs., Tibbetts; *P. vespertilionis* Kolenati 1857 rejected and invalid p. 92, Direction 66.

Petrobia brevipes sp. nov. Armenia p. 189; *P. erevanica* sp. nov. Armenia p. 190, Rekk (5); *P. erevanica* ♀ p. 82 fig.; *P. brevipes* ♀ . ♂ p. 84 fig., Bagdasaryan.

Phaulodinychnus minor p. 181 fig.; *P. repletus* p. 180 fig.; key to species p. 180, Willmann.

Phthiracarus tardus sp. nov. Sweden p. 216 figs., Forsslund (1).

Phyllocoptes nevadensis sp. nov. ♀ off *Euphorbia luteola*, Granada, Spain p. 27 figs.; *P. gracilis* comb. nov. ♀ p. 26, Roivainen.

Phyllodorychus [sic *Phyllodinychus*] *ornatus* sp. nov. ♀ with *Rattus norvegicus*, San Juan, Puerto Rico p. 69 fig., Fox.

Phytoptus dehesae sp. nov. ♀ off *Carex Goodenowii* v. *intricata*, Granada, Spain p. 17 fig.; Roivainen.

Phytoseiulus persimilis sp. nov. ♀. ♂ Staouéli, Alger p. 347 fig., Athias-Henriot.

Phytoseius horridus ♀. ♂ p. 343 fig.; *P. plumifer* ♀ p. 342 fig., Athias-Henriot; *P. plumifer* ♀ p. 362 figs., Chant (1).

Piona coccinoides subsp. *baffinensis* subsp. nov. ♂ Baffin Id. p. 1 figs., Habeeb (1); *P. (s.str.) brehmi* ♂. ♀ p. 258 figs.; *P. (s. str.) coccinea* var. *confertipora* ♂ p. 252 fig.; *P. (s. str.) disparilis* ♂ p. 255 figs.; *P. (s. str.) nodata* var. *nodatoides* ♀ p. 251 figs.; *P. (s. str.) nodata* ♂ p. 250 fig.; *P. (s. str.) rotunda* var. *rotundoides* ♂. ♀ p. 253 fig.; *P. (T.) discrepans* ♂ p. 257 fig., Lundblad.

Pionacercus (s. str.) *leuckarti* ♀ p. 248 figs.; *P. (s. str.) norvegicus* ♀ p. 248 fig.; *P. (P.) vatrax* ♀ p. 249 fig., Lundblad.

Platynothrus capillatus var. *peltiferinus* var. nov. Praded, Jeseniky Mts., Czechoslovakia p. 120; *P. capillatus* v. *septentrionalis* new to Czechoslovakia p. 120, Winkler (3).

Platyseius queenslandicus ♀ p. 205 fig., Domrow.

Plesiodamaeus glaber sp. nov. Madrid, Spain p. 55 fig., Mihelčič (3).

Pleisiolaelaps gen. nov. [Laelaptidae] p. 68; type species *P. miniopterus* sp. nov. ♀. ♂ off bat, *Miniopterus schreibersi*, Joanna, South Australia p. 68 figs., Womersley (3).

Pneumonyssus pangorillae sp. nov. ♀. ♂ in chimpanzee, *Pan paniscus*, Ponthierville, Belgian Congo also in *Gorilla gorilla rex-pygmaeorum* p. 235 figs.; *P. rodhaini* p. 236 fig.; *P. longus* sp. nov. ♀. ♂ in *Cercopithecus a. ascanius*, Kulingu, Belgian Congo p. 240 Fain (6).

Podothrombidium pilosum sp. nov. Kalehe, Kivu, Belgian Congo p. 319 fig., André.

Poecilochirus necrophori biology and anatomy p. 1802 figs., Belozero (1).

Pontarachna key to species p. 148, Viets, K. (1).

Posthermannia hirsuta comb. nov. for *Nanhermannia hirsuta* Hartman 1949, p. 456, Grandjean (2).

Proctophyllodes acanthicaulus sp. nov. ♂. ♀ off *Muscicapa striata* (Muscicapidae), Kribi and Yaoundé, South Cameroons p. 508 fig.; *P. anisogamus* sp. nov. ♂. ♀ off *Picathartes oreas*, Yaoundé, Cameroons p. 509 fig.; *P. aphyllus* sp. nov. ♂. ♀ off *Dicrurus atripennis* (Dicruridae), Yaoundé and Ambam, South Cameroons p. 509 figs., *P. mecistocaulus* sp. nov. ♂ off *Pyrhrurus simplex* (Pycnonotidae), Yaoundé, South Cameroons p. 511 fig.; *P. pachycaulus* sp. nov. ♂. ♀ off *Pyrhrurus simplex* (Pycnonotidae), Yaoundé, South Cameroons p. 511 figs.; *P. pachynotus* sp. nov. ♂ off *Pedilorhynchus comitatus camerunensis*, Kribi, South Cameroons p. 511 fig.; *P. rhynchocaulus* sp. nov. ♂. ♀ off *Platysteira cyanea* (Muscicapidae), Yaoundé, South Cameroons p. 512 figs.; *P. stenophyllus* sp. nov. ♂. ♀ off *Pycnonotus barbatulus gabonensis* and off *Thescelocichla leucopleura* (Pycnonotidae), Yaoundé and Ambam, South Cameroons p. 513 figs., Gaud & Mouchet (3).

Propriozeius gen. nov. [Phytoseiidae] p. 357; type species *P. meridionalis* sp. nov. ♀. ♂ off *Psychotria bahamensis*, Homestead, Florida p. 358 figs.; *P. clancyi* sp. nov. ♀. ♂ off wild blackberry, Keaneysville, West Virginia p. 358 figs., Chant (1).

Protodinychus gen. nov. [Protodinychidae] p. 239; type species *P. punctatus* sp. nov. ♀ Great Britain p. 239 figs., Evans (2).

Protoribates micropterus sp. nov. Guadarrama, Spain p. 114 fig., Mihelčič (4).

Protzia (s. str.) *curvipalpis* sp. nov. ♂. ♀ Bussaco, Portugal p. 39 figs.; *P. (s. str.) invalvaris* ♂ p. 43 figs.; *P. (s. str.) rugosa* ♂. ♀ p. 41 figs.; *P. (C.) annularis* ♀. ♂ p. 32 figs.; *P. (C.) eximia* ♀ p. 35 figs.; *P. (C.) octopora* ♀. ♂ p. 31 figs.; *P. (C.) squamosa* ♂ p. 34 figs., Lundblad.

Pseudopachylaelaps gen. nov. [Laelaptidae] p. 55; type species *P. ornatus* sp. nov. ♀ Pietermaritzburg, Natal p. 56 figs., Evans (1).

Pseudoradfordia gen. nov. [Myobiidae] p. 118; type species *Myobia affinis* Poppe 1896 p. 120 fig., Dubinin (1).

Pseudoschongastia novita sp. nov. larva off *Rattus rajah*, Bukit Lagong Forest Res., Selangor, also off *Tupaia glis* p. 371 fig., Audy & Womersley (6).

Pseudotorrenicola (P.) *quinquesculata* ♂. ♀ p. 145 fig., Lundblad.

Psorergates hystrici sp. nov. ♂. ♀ off porcupine, *Hystrix africae australis*, South Africa p. 329 figs., Till (2).

Psoroptes Gervais 1841 *equi* Gervais deleted from Official List as type species, amended *Sarcoptes equi* Raspail 1834, Bull. gén. Thér. méd. chir., Paris 7 (Suppl.): 182, p. 89, Direction 66; *P. equi* (Raspail) 1834 placed on Official List p. 116, Direction 67.

Psoroptoides gorillae sp. nov. ♂ off *Gorilla gorilla*, South Cameroons p. 136 figs., Gaud & Till (4).

Pterodectes acotylurus sp. nov. ♂. ♀ off *Vidua macroura* (Ploceidae), Ambam and Yaoundé, South Cameroon p. 514 figs.; *P. agriocercus* sp. nov. ♂. ♀ off *Pyrrhus simplex* and *Baepogon indicator* (Pycnonotidae), Yaoundé, South Cameroons p. 516 figs.; *P. allocaulus* sp. nov. ♂ off *Platysteira cyanea* (Muscicapidae), Yaoundé, South Cameroons p. 517 fig.; *P. amblycercus* sp. nov. ♂. ♀ off *Chloropeta natalensis batesi* (Muscicapidae), Yaoundé, South Cameroons p. 517 figs.; *P. brachycaulus* sp. nov. ♂. ♀ off *Malimbus coronatus* (Ploceidae), Ambam, South Cameroons p. 518 figs.; *P. centropus* sp. nov. ♂. ♀ off *Trachylaemus purpuratus* (Capitonidae), Kribi and Yaoundé, South Cameroons p. 519 figs.; *P. dicruri* sp. nov. ♂. ♀ off *Dicrurus atripennis* and *D. adsimilis* (Dicruridae), Ambam and Yaoundé, South Cameroons p. 520 figs.; *P. diplocercus* sp. nov. ♂. ♀ off *Stizorhina frazeri* (Muscicapidae), Ambam and Yaoundé, South Cameroons p. 522 figs.; *P. diplotrema* sp. nov. ♂. ♀ off *Poecoptera lugubris* (Sturnidae), Yaoundé, South Cameroons p. 523 figs.; *P. gigas* sp. nov. ♂. ♀ off *Amblyospiza albifrons saturata*, (Ploceidae), Yaoundé, South Cameroons p. 523 figs.; *P. glyphonotus* sp. nov. ♂. ♀ off *Alseonax cassini* and *Pedilorhynchus comitatus* (Muscicapidae), M'balmayo and Kribi, South Cameroons p. 524 figs.; *P. heterocaulus* sp. nov. ♂. ♀ off *Nigrita canicapilla*

(Ploceidae), Yaoundé, South Cameroons p. 526 fig.; *P. holostictus* sp. nov. ♂. ♀ off *Pycnonotus barbatus gabonensis*, off *Bleda eximia* and off *Calyptocichla serina* (Pycnonotidae), Yaoundé, South Cameroons p. 527 figs.; *P. leioplax* sp. nov. ♂. ♀ off *Cossypha cyanocampter* (Turdidae), Ambam; also off *Chlorocichla simplex* and off *Atimantillas flavicollis soro* (Pycnonotidae), Yaoundé, South Cameroons p. 527 fig.; *P. listroproctus* sp. nov. ♂. ♀ off *Picathartes oreas* (Sturnidae), Yaoundé, South Cameroons p. 528 figs.; *P. mesocaulus* sp. nov. ♂. ♀ off *Antheptes frazeri camerounensis* (Nectariniidae), Yaoundé, South Cameroons p. 529 figs.; *P. oligostictus* sp. nov. ♂. ♀ off *Lagonostica rubricata*, off *Clytospiza monteiri*, off *Estrilda nonnula* (Ploceidae), Yaoundé, South Cameroons p. 531 figs.; *P. pardalis* sp. nov. ♂. ♀ off *Malimbus coronatus* (Ploceidae), Ambam, South Cameroons p. 532 figs. & *P. platynecercus* sp. nov. ♂. ♀ off *Eranornis longicauda* (Muscicapidae), Yaoundé, South Cameroons p. 533 figs.; *P. synosternus* sp. nov. ♂. ♀ off *Spermophaga haematina* (Ploceidae), Yaoundé, South Cameroons p. 535 figs.; *P. papillo* p. 532 fig.; *P. ranci* p. 533 fig.; *P. stephanocaulus* p. 535 fig., Gaud & Mouchet (3); *P. buphagi* sp. nov. ♂. ♀ off Red-billed Oxpecker, *Buphagus erythrorhynchus*, junction Sabi and Lundi Rivers, S. Rhodesia p. 452 figs.; *P. delicatulus* sp. nov. ♂. ♀. N. off *Passer grisea*, Marinqa, Mozambique p. 450 figs., Till (1).

Pteroptus vespertilionis Dufour 1832 rejected and invalid p. 91, Direction 66.

Ptilonyssus cerchneis sp. nov. ♀ in nasal cavities of *Cerchneis tinnunculus rufescens*, Rugege, Belgian Congo p. 133 figs.; *P. indicatoris* sp. nov. ♀ in nasal cavities of *Indicator indicator*, Akanyaru, Belgian Congo p. 134 figs.; *P. andropadi* ♀ p. 114 figs.; *P. astridae* ♀ p. 98 figs.; *P. aureliani* ♀ p. 109 figs.; *P. calamocichlae* ♀ p. 114 figs.; *P. chlorocichlae* ♀ p. 114 figs.; *P. dicruri* ♀ p. 122 figs.; *P. capensis* ♀ p. 89 figs.; *P. dioptrornis* ♀ p. 124 figs.; *P. dryoscepi* ♀ p. 89 figs.; *P. emberizae* ♀ p. 95 figs.; *P. lanii* ♀ p. 103 figs.; *P. melittophagi* ♀ p. 121 figs.; *P. motacillae* ♀ p. 104 figs.; *P. oriolii* ♀ p. 114 figs.; *P. phyllastrephi* ♀ p. 104 fig.; *P. ploceanus* ♀ p. 89 figs.; *P. psalidoprocei* ♀ p. 117 fig.; *P. pycnonoti* ♀. ♂ p. 109 figs.; *P. ruandae*

♀ p. 109 figs.; *P. serini* ♀ p. 90 figs.; *P. strandmanni* ♀ p. 86 figs.; *P. triscutatus* ♀ p. 121 figs.; *P. viduae* ♀ p. 120 figs.; *P. zumpti* ♀ p. 91 figs., **Fain** (8).

Punctoribates hygrophilus sp. nov. Northern Spain p. 112 fig., **Mihelčič** (4); *P. pragensis* sp. nov. Prague, Czechoslovakia p. 127 fig., **Winkler**; *P. hexagonus* p. 45 fig., *P. sellnicki* p. 46 both new to Denmark, **Haarløv**.

Pygmephorus amplus, *P. arvorum*, *P. blumentritti*, *P. chaetosus*, *P. comatus*, *P. cultratus*, *P. gracilis*, *P. haarløvi*, *P. pratensis*, *P. sellnicki*, *P. togatus*, *P. willmanni* all new to Denmark pp. 24–25. **Haarløv**.

Rallinyssus congolensis ♀ p. 58 figs.; *R. limnocoracis* ♀ p. 60 figs., **Fain** (8).

Rhagidia intermedia, *R. mucronata*, *R. pratensis*, *R. sp.?* *diversicolor*, all new to Denmark pp. 30–31 figs., **Haarløv**.

Rhinoecius tytonis ♀ p. 131 figs., **Fain** (8).

Rhinonyssus afribyx ♀ p. 48 figs.; *R. poliocephali* ♀ p. 45 figs., **Fain** (8).

Rhinophaga atheruri sp. nov. ♀. ♂ in frontal sinus of porcupine, *Atherurus africanus centralis*, Irangi, Congo Belge p. 77 figs.; *R. leopoldi* sp. nov. ♀. ♂ in frontal sinus of porcupine, *Atherurus a. centralis*, Irangi, Congo Belge p. 71 figs.; key to ♀♀ p. 81, **Fain** (3); *R. hystrixi* sp. nov. ♀. L. off porcupine, *Hystrix africaeaustralis*, South Africa p. 331 figs., **Till** (2).

Rhinoptes pternistis ♀. ♂ p. 37 figs., **Fain** (8).

Rhipicentor bicornis Nuttall and Warburton 1908 placed on Official List p. 115, **Direction 67**.

Rhipicephalus confusus sp. nov. ♂. ♀ off buffalo, Ile, Zambesia, also off *Syncerus caffer pungwensis*, off *Phacochoerus aethiopicus sundevalli*, off *Taurotragus oryx livingstoni*, off *Potamochoerus porcus koiropotamus*, off *Sylvicapra grimmia altifrons*, off *Ozanna g. grandicornis*, off *Kobus e. ellipsiprymnus* p. 40 figs.; *R. falcatus* Neumann 1908 = *R. longus* Nn. 1907 p. 44: *R. pseudolongus* Dias 1953 = *R. longus* Nn. 1907 p. 44, **Dias**; *R. boueti* sp. nov. ♂. ♀ off *Procavia ruficeps*, Agouagou, Dahomey p. 696 fig., **Morel**; *R. humeralis* ♂. ♀. N. L. hosts and distribution p. 145 figs., **Walker**; *R. Koch* 1844 placed on Official List p. 88, **Direction 66**; *R. sanguineus*

(Latreille) 1806 placed on Official List p. 115, **Direction 67**; *R. sanguineus* ♂ p. 51 fig., **Barrera**; *R. sanguineus sanguineus* p. 101 figs., **Kohls**; *R. sanguineus* p. 26 figs., **U.S. Army 406 Med. Gen. Lab.**

Rhizoglyphus echinopus ♀. ♂. N. p. 123 figs., **Türk & Türk**.

Rhodacarus marksae sp. nov. ♀ Green Ant Is., Great Barrier Reef p. 200 figs., **Domrow**; *R. strenzkei* sp. nov. ♂ Grünen Insel, Germany p. 166 fig., **Willmann**; *R. roseus* p. 19 figs., **Haarløv**.

Rhopalanoetus gen. nov. [Tyroglyphidae: Anoeatinae] p. 362; type species *Anoetus lanceocarinus* Oudemans 1914 p. 362 figs., **Scheucher**.

Rhyncaphyoptus aiasuënsis sp. nov. ♀ off *Salix "aurita"*, Navarra, Spain p. 31 fig.; *R. ulmicola* sp. nov. ♀ off *Ulmus scabra*, Navarra, Spain p. 32 fig., **Roivainen**.

Rodhainyssus brutsaerti in eyes of *Epomophorus* sp. [Mamm.] Kivu, Belgian Congo p. 253, **Fain** (5).

Ruandanyssus gen. nov. [Rhinonyssidae] p. 148; type species *R. terpsiphonei* sp. nov. ♀. ♂ in nasal cavities of *Terpsiphone viridis kivuensis*, Astrida, Ruanda-Urundi p. 148 figs.; *R. apus* sp. nov. ♀. ♂ in nasal cavities of *Apus caffer streubeli*, Akanyaru, Ruanda-Urundi p. 151 figs., **Fain**.

Saproglyphus neglectus ♀ p. 151 fig., **Türk & Türk**.

Sarcoptes vespertilionis Latreille 1802–1803 rejected and invalid p. 92, **Direction 66**.

Scarabaspis punctatus sp. nov. ♀. ♂. N. from cattle dung, Phewa Tal, Nepal p. 413 figs.; *S. inexpectatus* comb. nov. pro. *Emeus inexpectatus* Oudemans 1903, p. 411 figs.; *S. orientalis* comb. nov. pro. *Iphidozercon orientalis* Berlese 1920 p. 410; *S. aspera* Womersley 1956 syn. of *S. orientalis* p. 410; Genus redefined and transferred from Hypoaspidae to Eviphidinae p. 409; Key to species p. 410, **Evans**; *S. africanus* sp. nov. ♀ off *Pachylomora femoratus*, Manico Rd., South Rhodesia p. 616 figs., **Ryke & Meyer** (1).

Scheloribates penicillatus sp. nov. Aranjuez, Spain p. 109 fig.; *S. barbatus* p. 110 fig.; *S. angustirostris* sp. nov. Guadarrama Mts., Spain p. 110 fig., **Mihelčič** (4); *S. laevigatus* p. 46 fig., **Haarløv**.

Schizonobiella gen. nov. [Tetranychidae] p. 87; type species *S. aeola* sp. nov. ♀. ♂ Alice, Texas p. 87 figs., Beer & Lang (1).

Schizotetranychus aceri ♀. ♂ p. 133 fig.; *S. aetjanae* ♀. ♂ p. 121 fig.; *S. bakurianensis* ♀. ♂ p. 139 fig.; *S. bambusae* ♀. ♂ p. 136 fig.; *S. carpinula* ♀. ♂ p. 130 fig.; *S. coryli* ♀. ♂ p. 127 fig.; *S. fagi* ♀. ♂ p. 134 fig.; *S. fraxini* ♀. ♂ p. 124 fig.; *S. georgicus* ♀. ♂ p. 120 fig.; *S. jachontovi* ♀. ♂ p. 123 fig.; *S. ibericus* ♀. ♂ p. 137 fig.; *S. pruni* ♀. ♂ p. 125 fig.; *S. pterocaryae* ♀. ♂ p. 125 fig.; *S. rubiphilus* ♀. ♂ p. 139 fig.; *S. salicicola* ♀. ♂ p. 140 fig.; *S. schizopus* ♀. ♂ p. 138 fig.; *S. telarius* ♀. ♂ p. 129 fig.; *S. ulmicola* ♀. ♂ p. 130 fig.; *S. viticola* ♀. ♂ p. 131 fig., Bagdasaryan; *S. aetjanae* sp. nov. Armenia p. 54, Bagdasaryan (2); *S. jachontovi* sp. nov. Georgia, SSR. p. 175, Rekk (1); *S. georgicus* sp. nov. Georgia p. 176, Rekk (2); *S. carpinula* sp. nov. Georgia p. 131; *S. coryli* sp. nov. Georgia p. 130; *S. pterocaryae* sp. nov. Georgia p. 130, Rekk (3).

Schongastia propria sp. nov. larva off *Natrix piscatrix*, Bombay, India p. 367 fig., Audy & Womersley (6); *S. (Ascoschongastia) longisetosa* sp. nov. larva off *Naja naja*, India p. 313, Hiregaurdar (2); *S. cantonensis* sp. nov. larva Kwangtung Province, China p. 225 figs., Liang et al.; *S. hyracis* sp. nov. larva off *Hyrax* sp., Kaabong, Uganda p. 486 fig., Vercaemmen-Grandjean & Brennan (5); *S. radfordi* larva p. 564 figs., Abonnenc & Taufflieb (1).

Schöngastiella punctata new to Turkmenia p. 455 fig., Schluger & Myshchenko (1).

Schoutedencoptes aquilae ♀. ♂ p. 20 figs.; *S. dartevellei* ♀ p. 22 figs.; *S. numidae* ♀. ♂ p. 17 figs., Fain (8).

Schwiebea talpa new to Denmark p. 32, Haarløv; *S. talpa* ♂. ♀ p. 293 figs., Hughes (1); *S. cavernicola* ♀. ♂. N. p. 127 figs.; *S. eury nymphae* ♀. ♂. N. p. 129 figs.; *S. nova* ♀. ♂. N. p. 131 figs., Türk & Türk.

Schwiebea? carli sp. nov. deutonym. off *Lasius flavus*, Erlangen, Germany p. 138 fig.; *S.? koernerii* sp. nov. deutonym. off *Lasius brunneus*, Erlangen, Germany, p. 139 fig.; *S.? menzeli* sp. nov. deutonym. off *Melanotus castanipes*, off *Dolopius marginatus* off

Myrmica laevinodis, France and Germany p. 137 fig.; *S.? nesbitti* sp. nov. deutonym. off *Dorcus parallelopipedus*, off *Melanotus rufipes*, off *Unciger foetidus*, off *Pterostichus anthracinus*, Baden and Erlangen, Germany p. 136 fig.; *S.? scheucherae* sp. nov. deutonym. off *Craspedosoma allemanicum*, off *Julus scandinavicus*, off *Camponotus ligniperda*, Erlangen, Germany p. 135 fig. *S.? schmuttereri* sp. nov. deutonym. *Lasius brunneus*, off *Lithobius forficatus*, off *Carabus violaceus*, Erlangen, Germany p. 134 fig., Türk & Türk.

Scutacarus haarlovi, *S. montanus*, *S. quadrangularis*, *S. similis*, *S. subterraneus* all new to Denmark p. 24, Haarløv.

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of *Hylocichla u. ustulata*, (russet-backed thrush), California p. 480 figs.; *S. strandmanni* sp. nov. ♀. N. L. in nasal cavity of *Agelaius tricolor*, California p. 476 figs.; *S. cryptorhynchum* ♀ p. 475 fig.; *S. technaui* ♀ p. 482 figs.; *S. tracheacolum* ♀ p. 478 figs.; *S. turdi* ♀ p. 481 figs.: Key to species p. 474, **Furman**.

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Typhlodromus longilaterus sp. nov. ♀. ♂ off *Cynodon dactylon* (Graminaeae), Rovigo, Algeria p. 218 figs.; *T. ornatus* sp. nov. ♀ off *Rubus ulmifolius*, Baraki, Algeria p. 216 fig., **Athias-Henriot** (1); *T. (Typhlodromus) arboreus* sp. nov. ♀ off apple leaves, Vancouver, British Columbia p. 292 figs.; *T. (T.) flumensis* sp. nov. ♀ off soapallie (*Shepherdia canadensis*), Hedley, British Columbia p. 290 figs.; *T. (T.) singularis* sp. nov. ♀. ♂ off Douglas Fir, McIntyre Creek, British Columbia also off ponderosa pine, off lodgepole pine, off white pine, off juniper, off maple, off *Thuja* sp., off sumac, off mock orange (*Philadelphus lewisii*), off black cotton wood (*Populus trichocarpa*), off willow, and off spruce p. 289 figs.; *T. (T.) validus* sp. nov. ♀ off ponderosa pine, McIntyre Creek, British Columbia also off black cotton wood and off wild cherry p. 290 figs.; *T. (Amblyseius) andersoni* sp. nov. ♀ off prune foliage, Rosedale, British Columbia p. 296 figs.; *T. (A.) berlessei* sp. nov. ♀. ♂ off *Ranunculus* sp., Nakusp, British Columbia also off birch (*Betula* sp.) p. 292 fig.; *T. (A.) desertus* sp. nov. ♀ off black cottonwood, McIntyre Creek, British Columbia also off willow p. 294 figs.; *T. (A.) morgani* sp. nov. ♀ off dandelion, Trout Creek Point, British Columbia p. 294 figs.; *T. (A.) okanagensis* sp. nov. ♀. ♂ off peach foliage, Oliver, British Columbia also off "cover crop," off apple leaves and off burdock p. 293 figs.; *T. (A.) aequipilus* ♀ p. 302 figs.; *T. (A.) caudatus* ♀ p. 306 figs.; *T. (A.) foenalis* ♀ p. 300 figs.; *T. (A.) fraterculus* ♀ p. 300 figs.; *T. (A.) grandis* ♀ p. 304 figs.; *T. (A.) longulus* ♀ p. 302 figs.; *T. (A.) perlongisetus* ♀ p. 299 figs.; *T. (A.) obtusus* ♀ p. 306 figs.; keys to ♀♀ of British Columbia p. 298, **Chant**; *T. aceri* sp. nov. ♀. ♂ off maple, *Acer campestre*, Essex, England also off hazel, *Corylus avellana* p. 199 fig.; *T. scoticus* sp. nov. ♀. ♂ off *Salix* sp. Kyle of Lochalsh and Achiltibuie, Scotland p. 200 figs., **Collyer**; *T. mesembrinus* sp. nov. ♀ off corn leaf, predator of *Oligonychus pratensis* Mercedes, Texas p. 165, **Dean**; *T. alveolaris* sp. nov. ♀ off

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Urotrachytes formicarius new to Denmark p. 23, **Haarlov**.

Vaghia simplex sp. nov. ♂. ♀ Silleda, Spain and Pyrénées-Orientales, France p. 205 figs., **Travé**.

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tetractrum v. *rotundifolium*, Granada, Spain p. 22 fig.; *V. lepidii* sp. nov. ♀ off *Lepidium stylatum*, Granada, Spain p. 22 fig.; *V. querci-ilicis* sp. nov. ♀ off *Quercus ilex*, Navarra, Spain p. 23; *V. rubiae* sp. nov. ♀ off *Rubia peregrina*, Guipúzcoa, Spain p. 24 fig.; *V. variabilis* sp. nov. ♀ off *Salix daphnoides*, Almería, Spain p. 24 figs.; *V. ballei* ♀ comb. nov. p. 18; *V. destructor* ♀ p. 19 figs., **Roivainen**.

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Veigaia bakeri sp. nov. ♀ Mocksville, North Carolina p. 23 figs.; *V. ignasetta* sp. nov. ♀. ♂ Vancey Co., North Carolina p. 38 figs.; *V. lucilia* sp. nov. ♀ Korean National Forest p. 49 figs.; *V. piliseta* sp. nov. ♀. ♂ Wake Co., North Carolina p. 56 figs.; *V. smithi* sp. nov. ♀. ♂ Davie Co., North Carolina p. 70 figs.; *V. tibbetsi* sp. nov. ♀ Korea p. 74 figs.; *V. uncata* sp. nov. ♀ Raleigh, North Carolina p. 82 figs.; *V. bouvieri* ♀. ♂ p. 27 figs.; *V. capreolus* comb. nov. for *Cyrtolaelaps capreolus* Berlese 1905 p. 28 fig.; *V. cerva* ♀. ♂ p. 29 figs.; *V. exigua* p. 33 fig.; *V. kochi* ♀ p. 42 fig.; *V. leruthi* ♀. ♂ p. 47 figs.; *V. mitis* comb. nov. for *Cyrtolaelaps mitis* Berlese 1916 p. 52 figs.; *V. paradoxa* ♀. ♂ p. 56 figs.; *V. planicola* ♀ p. 62 fig.; *V. propinqua* ♀. ♂ p. 63 figs.; *V. pusilla* ♀ comb. nov. for *Cyrtolaelaps pusillus* Berlese 1916 p. 65 figs.; *V. serrata* ♀ p. 67 figs.; *V. transisalae* ♀. ♂ p. 77 figs.; key to ♀♀ p. 17; key to Nearctic ♂♂, **Farrier**; *V. cervus*, *V. kochi*, *V. nemorensis*, *V. serrata* all new to Denmark p. 23, **Haarlov**.

Vercammenia gen. nov. [Trombiculidae] p. 95; type species *V. hendricksoni* sp. nov. larva off *Rana macdonon*, Kuala Tahan, Central Pahang p. 97 figs., **Audy & Nadchatram** (4).

Vidia stoeckherti sp. nov. deutonym. off *Megachile* sp., Erlangen, Germany p. 152 fig., **Türk & Türk**.

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Wandesia japonica nymph p. 352 fig., Imamura (1); *W. thori* nymph p. 292 figs., Láska (1).

Whartonia indica sp. nov. larva off *Rhinolophus rouxi*, Tulsi Lake Tunnel, Bombay, India p. 253 figs., Hiregaudar & Bal (3); *W. oweni* sp. nov. larva off *Rhinolophus eloquens*, Torit, Sudan, also off *Rousettus* sp. p. 495 fig., Vercammen-Grandjean & Brennan (5); *W. penthetor* sp. nov. larva off bat, *Cynopterus* (*P.*) *lucasi*, Kepong, Malaya p. 103 figs., Womersley (1).

Wichmannia stammeri sp. nov. ♀. ♂. N. off *Staphylinids*, Erlangen, Germany p. 374 figs.; *W. talpae* sp. nov. ♀. ♂. N. from nest of *Talpa europaea*, Erlangen, Germany p. 372 figs.; *W. spinifera* ♀. ♂. N. p. 370 figs., Scheucher.

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Xenillus clypeator, capitulum p. 88 fig., Grandjean (3).

Yunkeracarus gen. nov. [Epidermoptidae] p. 473; type species *Y. muris* sp. nov. ♀. ♂ in nasal cavities of *Arvicanthis abyssinicus rubescens* and *Pelomys fallax*, Astrida, Belgian Congo p. 474 figs., Fain (1).

Zercon supinus sp. nov. Zillertaler Alpen, Tirol p. 101 fig.; *Z. franzi* p. 100 fig., Mihelčič (5); *Z. forsslundi* sp. nov. ♀. ♂. NH. Ångermanland, Sweden p. 156 figs., Sellnick (1); *Z. triangularis* new to Denmark p. 23, Haarløv.

Zetorchestes equestris, redescrib. p. 90 figs., Woolley.

Zygolaelaps gen. nov. [Laelaptidae] p. 367; type species *Z. madagascariensis* sp. nov. ♀. ♂ off *Nesogale dobsoni* (Mamm.) Tananarive, Madagascar p. 369 figs., Tipton.

ANTHRACOMARTI

No record.

KUSTARACHNIDA

No record.

HAPTOPODA

No record.

TRIGONOTARBI

No record.

PHALANGIOTARBI

No record.

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Diesingia sp. new host, *Engyrus carinatus* (Pacific boa), Florida Id., Solomon Is. p. 196, Self & Kuntz.

Kiricephalus pattoni, new host, *Ahaetulla calligaster* (painted bronze snake), Florida Id., Solomon Is. p. 196, Self & Kuntz.

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Raillietiella affinis, new host, *Lepidodactylus lugubris* (sad gecko), Florida Id., Solomon Is. p. 196; *R. affinis*, new host, *Scincus officinalis* (Egyptian sand skink), Nile Delta, also from *Chalcides sepsoides* (sand skink), from *Agama stellio* (starred lizard), from *Eumeces schneiderii* (gold skink), from *Uromastix aegyptia* p. 195; *R. gehyrae* new host, *Agama stellio*, Egypt p. 195, Self & Kuntz.

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Macrobiotus echinogenitus new to United States of America p. 144 figs.; *M. intermedius* new to United States of America p. 144 figs., **Curtin**; *M. furciger* new to Rumania p. 151, **Péterfi**; *M. spertii* sp. nov. Colle Sud del Monte Sarmiento, Tierra del Fuego p. 189 figs., **Ramazzotti**.

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Venezuelides hasei p. 372 figs., **Kraus** (6).

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Microchordeuma (M.) gallicum p. 500 fig.; *M. (C.) scutellare*, *M. scutellare* var. *bagnalli*, *M. scutellare* var. *brolemanni* p. 502 figs., Blower; *M. gallicum* new to Great Britain p. 285, Eason (1).

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Oligodesmus michelbacheri sp. nov. ♂ Ovale, Chile p. 27 figs., Chamberlin.

Oncodesmoides weyrauchi sp. nov. ♂ San Andres, Cutervo, Peru p. 103 figs., Kraus (3).

Ophiulus fallax p. 192 fig., Loska.

Oroposoma ticinense sp. nov. ♂ Grotta Caurga, Ticino, Switzerland p. 161 figs., Manfredi (1).

Oxypyge tingomariae sp. nov. ♂. ♀ Tingo Maria, Peru p. 104 figs., Kraus (3).

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Peridontopyge galicheti sp. nov. ♂ Tchad, French Equatorial Africa p. 99 fig., Demange; *P. vachoni sp. nov.* ♂ Abidjan, Ivory Coast p. 156 figs., Demange (1); *P. aberrans* ♂ p. 228 figs., Demange (2).

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Polyxenus rossi sp. nov. Zapallar, Chile p. 8 fig., **Chamberlin**; *P. lagurus* and *P. lucidus*, spermatogenesis p. 1 figs., **Tuzet & Manier**.

Pseudocatapyrgodesmus gen. nov. [Pyrgodesminae] p. 264; type species *P. glaucus* sp. nov. ♂. ♀ Oyama-Dai, Tokyo, Japan p. 265 figs., **Miyoshi** (3).

Rhinocricus cutervoensis sp. nov. ♂ San Andres, Cutervo, Peru p. 105 figs.; *R. yanus* p. 108 figs., **Kraus** (3); *R. electrofasciatus* sp. nov. ♂. ♀ Serra do Cachimbo, Pará, Brazil p. 309 figs., **Schubart**; *R. morechalus* nom. nov. pro. *R. dispar* Causey 1954 preocc. **Silvestri** 1895 p. 120, **Causey** (1).

Rhysolus datei sp. nov. ♂. ♀ Kasima, Ehime-Ken, Japan p. 406 figs., **Miyoshi** (5).

Schizophyllum sabulosum, abnormalities of anterior legs p. 275 figs., **Sahli**.

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Siphonophora margaritifera sp. nov. ♂ Cutervo, North Peru p. 113 figs., **Kraus** (3).

Skleroprotopus osedoensis sp. nov. ♂ Osedō Höhle, Kumamoto-Ken, Japan p. 31 fig., **Miyoshi** (2); *S. sidegatakedensis* sp. nov. ♂ Sidegatake-Dō Höhle, Ehime-Ken, Japan p. 406 fig., **Miyoshi** (5).

Soleureus subgen. nov. see *Polydesmus*, **Manfredi** (1).

Spirobolus, identity and history p. 62; *S. bungii* ♂ p. 64 figs., **Hoffman**.

†*Spirobolus* (?) sp. from Tertiary resin, Allendale, Victoria p. 20 figs. **Tiegs**.

Spirostreptus multisulcatus sp. nov. ♂. ♀ Libenge, Tchad, A.E.F. p. 323 figs., **Demange** (3).

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Zinagon gen. nov. [Cambalidae] p. 40; type species *Z. osorno* sp. nov. ♂. ♀ Osorno, Chile p. 40 figs., **Chamberlin**.

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Faunal list, Kashima Islets, Japan, **Morikawa** (1).

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Schizomus (Trithyreus) formicoides
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Fernando.

Symphylella maorica sp. nov. Little
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figs., Dobroruka (1).

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Faunal list.—Switzerland, Remy (7).

Allopauropus blandinae sp. nov. ♂
M'Basso, Agnibilekrou, Ivory Coast
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♂. ♀ M'Basso, Agnibilekrou, Ivory
Coast p. 752 fig.; *A. vespertalis* sp. nov.
♂. ♀ M'Basso, Agnibilekrou, Ivory
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Hemipauropus gressitti sp. nov. ♂
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Samarangopus browni sp. nov. ♂
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Scleropauropus stephani sp. nov.
♂. ♀ M'Basso, Agnibilekrou, Ivory
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sp. nov. ♂. ♀ San Cristobal las Casas,
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gen. nov.) *quadrisulcus* sp. nov. ♂. ♀
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Faunal list.—South Africa, Brinck.

ERRATA

Vol. 41 1904: 8 Title "32" delete.
[Coelentrata]: 44 last 2 lines delete.

Vol. 83 1946: 73 col. 2 line 10 from
bottom for "*Mycocptes*" *stigmatus*
read "*Mysolaelaps*" *stigmatus*.

Vol. 90 1953: 79 line 13 for "*Atrax*"
read "*Atax*."